1-1-1987

Situational influences on consumer preferences when products are suitable for several types of consumption situations.

Evangelos D. Kechris
University of Massachusetts Amherst

SITUATIONAL INFLUENCES ON CONSUMER PREFERENCES

WHEN PRODUCTS ARE SUITABLE FOR SEVERAL TYPES OF CONSUMPTION SITUATIONS

A Dissertation Presented

by

Evangelos D. Kechris

Submitted to the Graduate School of the
University of Massachusetts in partial fulfillment
of the requirements for the degree of

DOCTOR OF PHILOSOPHY

February 1987

School of Managment

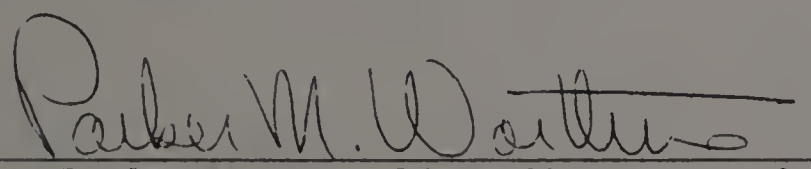
SITUATIONAL INFLUENCES ON CONSUMER PREFERENCES WHEN PRODUCTS ARE SUITABLE FOR SEVERAL TYPES OF CONSUMPTION SITUATIONS

A Dissertation Presented

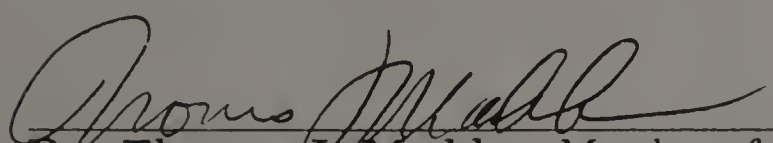
by

Evangelos D. Kechris

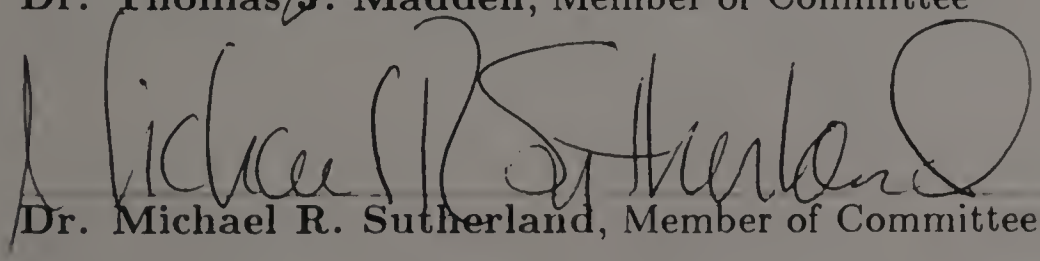
Approved as to style and content by:



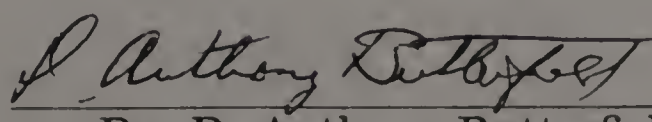
Dr. Parker M. Worthing, Chairperson of Committee



Dr. Thomas J. Madden, Member of Committee



Dr. Michael R. Sutherland, Member of Committee



Dr. D. Anthony Butterfield,
Director/Ph.D. Program, SOM

To My Mother

and

the Memory of

My Father

ACKNOWLEDGEMENTS

While any deficiencies in this study are solely my responsibility, credit for whatever merit it contains must be shared with the many people whose aid and support were crucial to its preparation. Although mere words do not seem adequate, I must make the attempt.

I would like to express my deepest gratitude to my advisor, Dr. Parker Worthing, the chairperson of my doctoral committee, who encouraged and guided me throughout my doctoral program and generously shared of his time carefully reviewing and analyzing this work. Without his support this work would not have been completed. I would like to thank another member of the committee, Dr. Thomas Madden, for his direction, flexibility and encouragement. Also, I would like to thank the third member of my committee, Dr. Mike Sutherland, for his direction, encouragement and especially his help in editing the final draft of my dissertation.

There are a number of other people who deserve special mention for their contribution to this study. Ajith Kumar, Naredra Mulani, Subhasish Mazumdar, Eva Goldwater and Louis Widgor, all helped in various ways, through their willingness to criticize my ideas or their contribution analyzing the data and revising the final draft of this study. Special thanks goes to Dr. Jim Schwartz for his help obtaining the data. Also I would like to extend my sincere appreciations to my friend Rajendar Garg, for his great help in reviewing the first draft of this work.

I am also especially grateful to my friend Panos Chrysanthis for his continued encouragement, his helpful suggestions and generous aid in reviewing and revising

the manuscript.

Also I am deeply indebted to a special friend whose tremendous support and encouragement made my graduate studies a reality.

And finally, to my family I owe an incalculable and special debt of gratitude for their support, encouragement, patience, and most importantly for their unfailing belief in me.

A B S T R A C T

SITUATIONAL INFLUENCES ON CONSUMER PREFERENCES WHEN PRODUCTS ARE SUITABLE FOR SEVERAL TYPES OF CONSUMPTION SITUATIONS

February 1987

EVANGELOS D. KECHRIS

B.A. Graduate Industrial School of Thessaloniki
M.B.A. University of Bridgeport
Ph.D. University of Massachusetts

Directed by: Professor Parker Worthing

This study investigated the interaction effects among persons, consumption situations, and products chosen. The principal research question was whether the two-way interactions of product-situation and product-person are adequate to model product choice, or whether the three-way interaction is needed.

The utilized secondary data was collected through telephone questionnaires by a market research firm for a national weekly magazine. Product choice was wine or beer in seventeen consumption situations. Six consumption situations were selected for the analysis.

Thirty-seven demographic and psychographic characteristics of the individuals were initially used to determine the final person-characteristics (profiles). Through cross-classification of six variables at a time and analysis using BMDP-4F, the

characteristics were reduced to thirteen dichotomous variables. The new variables were again cross-classified, six at a time, and analyzed through BMDP-4F program to determine the most significant ones for the profile creation.

One to six-class unrestricted latent class models were applied to nineteen six-way contingency tables through MLLSA program to uncover distinct profiles. Only the six-class models fit the data satisfactorily. The classification of the variables - employment, club membership, education, spouse employment, age, and income - produced the best profiles. All individuals with the above characteristics were assigned to one of the six latent classes determined by MLLSA. This created the six-level variable "consumers' characteristics".

The three variables - profiles (at six levels), consumption situations (at six levels), and product choice (at two levels) were used to create a 6 x 6 x 2 contingency table which was utilized to test the hypotheses. The table was analyzed by applying the multiplicative logit analysis.

The results indicated that all interactions were significant. Individuals with different profiles prefer different alcoholic products in different consumption situations. The findings suggest that knowing the person within a consumption situation provides more useful information to the marketing manager than consumers' characteristics or consumption situation alone. The results further suggest that consumers' characteristics should be taken into consideration when consumption situations are used for market segmentation and communication strategies.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

CHAPTER I

INTRODUCTION

A major task of marketing managers is to find and explore new market opportunities for their products. In the last decade, greater product proliferation, lower economic growth, the skyrocketing cost of money, and the substantial inroads of imports in every market have made this task more difficult. The lack of new market opportunities is forcing marketing managers to try to further explore existing markets for existing products. One way to accomplish this is through market segmentation and positioning strategies.

Market segmentation represents an important development in marketing thought and strategy. It is defined as "the subdividing of the market into distinct subsets of customers, where any subset may conceivably be selected as a target market to be reached with a distinct marketing mix."(Kotler 1980). These homogeneous subgroups of customers have the same needs.

Greater product proliferation, along with the extensive utilization of market segmentation strategies, has made segmentation less and less effective. It appears that marketing managers need to find more appropriate bases for segmenting markets.

For almost thirty years the assumption underlying consumer behavior research has been that if we know enough about consumers and about the objects(products)

which they are purchasing and consuming, we will be able to perceive stable relationships between types of people and types of products. These relationships will help us to understand, influence and predict consumer behavior. This assumption has also influenced segmentation strategy in that the most common base for segmenting markets in the last decade has been the use of either people's general characteristics or benefits sought by them.

The weak relationships and generalizations that resulted from the above research influenced researchers and academicians to explore many different bases for better understanding consumer behavior. One basis involved consumption situations of the consumers. During the early 1970s the situational perspective started to make inroads into consumer behavior research. First evidence of the importance of consumption situations on behavior came from social psychology. Mischel (1968) argued that an individual's behavior is consistent from one time to another if the situations are similar. More than a decade later, Epstein (1979) concluded that "... it is normally not possible to predict single instances of behavior averaged over a sample of situations and/or occasions." Engel, Kollat and Blackwell (1969) advocated consideration of both situational and individual variables. Furthermore, Ward and Robinson (1973) contended that situational variables may produce considerably more variance than person-related variables. As this evidence accumulated, researchers began realizing the importance of the situation in the choice process.

In a review of the situational influence on consumer behavior, Kakkar and Lutz (1980) suggested that "...a comprehensive understanding and accurate prediction of behavior in the marketplace demands a situational perspective."

The significance of situation variables on segmentation research became apparent. Thus, the lack of consideration of the consumption situation in the analysis

of product markets was soon realized (Leigh and Martin 1981, Shocker and Srinivasan 1979). Day, Shocker, and Srivastava (1979) stated that "...the concept of usage situation appears to be the most prevalent common denominator of market environments which can be used as the basis for empirical methods to identify product-markets."

Even though consumption situations were suggested by several researchers (Wind 1978, Dickson 1982, Belk 1979, Leigh and Martin 1981, Srivastava 1980, Fennell 1978, 1982, Kotler 1984, and Frank, Massey and Wind 1972), very few studies utilized consumption situations as a basis for market segmentation (Sharpe and Granzin 1974 and Stout et al. 1980). Surprisingly, no formal study involving consumption situations has been undertaken, despite the emphasis signified by many researchers.

The evidence of the situational influence on consumer behavior suggests that situation may be used as a basis for segmentation. In most consumption situations the individual does not have to decide whether or not s/he will consume a particular product/brand but what product/brand to select from a list of products/brands suitable for consumption in the particular situation.

In using consumption situations as a segmentation base, the following question needs to be answered: Is the consumption situation solely determining what the individual's behavior will be in a particular consumption situation, or is it the person within the consumption situation which determines product choice? This study contends that the person within consumption situations, rather than the situation alone, determines the product choice. This position implies a significant three-way interaction among persons. situations and products chosen. The three-way interaction means that a group of people prefers product A in a subset of

consumption situations, and that another group of people prefers product B in a different set of consumption situations.

This study examines the extent of situational influence on consumer product choice for products which are suitable across a wide class of consumption situations. A significant interaction among consumer characteristics, consumption situations, and products suggests that consumption situations may be profitably used as a base for segmentation in conjunction with consumers' characteristics. In other words, it is possible to identify a group of consumers selecting one product in a set of consumption situations, and another group preferring another product in a different set of consumption situations.

This study is exploratory. The alcoholic beverage market (beer, wine) will be utilized because it appears to be one of the most volatile industries today. Most of its products are in the mature stage of their product life cycle. Product proliferation is high and the cost of introducing new products is constantly increasing. Advertising expenditures have been drastically increasing during the last decade. Most companies have multiple brands in most product categories, and the risk of product cannibalization is high. Imports are making bigger inroads into every product category in the market. Most of the alcoholic products are consumed in a variety of consumption situations and are substitutes. Furthermore, consumption of these products is conspicuous. which increases the influence of psychological factors. Additionally. brand attribute evaluation is difficult (brands do not have distinct characteristics) and susceptible to psychological influences.

Under these conditions. good market target selection and positioning are extremely crucial. In the 1980s most companies will try to get the most out of their existing brands and products. A good market segmentation and positioning strat-

egy is imperative. This puts the pressure on the marketing manager to find new ways to segment the market. Thus, marketing managers need to find and utilize more appropriate variables for market segmentation.

1.1 CONTRIBUTIONS TO MARKETING

Conceptual: The present study investigates the interactions among consumers, consumption situations, and products chosen. A significant three-way interaction among consumers, consumption situations, and products chosen suggests that consumption situation along with consumers' characteristics, rather than the consumption situations alone, is a more appropriate base for market segmentation. A nonsignificant three-way interaction and a significant two-way interaction between products and the consumption situations suggest that situations alone can be used as a base for market segmentation. Even though consumption occasions have been utilized for segmentation, Stout et al. (1980) and Sharpe and Granzin (1974), these studies yielded too many market segments with few implications for managers.

Pragmatic: The study suggests that knowing consumers' characteristics within situations is a better predictor of consumer behavior than knowing either consumers' characteristics alone or the type of consumption situations alone. In addition, the study suggests an alternative base(consumption situations by consumers' characteristics) for market segmentation of products suitable in a variety of consumption situations. The utilization of consumption situations as a basis may contribute to a better identification of problems and opportunities in the marketplace. It may also help the marketing manager select more appropriate target markets, and it may suggest alternative positioning strategies (by consumption situ-

ations and consumers' characteristics) and more suitable communication messages. As Assael (1981) stated, "...if advertising conforms to consumers' perceptual predispositions, the message is more likely to be received." In an era where companies are shifting from brand to product-line marketing (Morein 1975), the above pragmatic contributions are very important.

1.2 CONCLUSION

In conclusion, this study attempts to investigate the interaction among consumers' characteristics, consumption situations, and products which are suitable for several types of consumption situations. This thesis is developed more fully in the succeeding chapters. Chapter two reviews and summarizes literature on the importance and influence of consumption situations on consumer behavior. Chapter three, employs the ideas developed in chapters one and two in presenting the development of the research hypotheses to be tested, as well as the methodology to be employed. Chapter four presents the analysis, results and discussion of the research. Finally, chapter five will analyze the present study's usefulness, limitations, and implications for future research.

CHAPTER II

SITUATIONAL INFLUENCES

2.1 THEORETICAL BACKGROUND

Situational influences have a theoretical foundation in Lewin's field theory (Lewin 1936) and the modern interactionism conception of human behavior. These perspectives asserted that human motivations, intentions, and behavior are a function of the interaction between consumers and situations. These theories claimed that each individual views each physical and social setting somewhat differently.

Lewin (1935, 1936, 1938, 1951) made the distinction between the physical and psychological environments, and emphasized the psychological situation rather than the physical one. The physical environment referred to the 'objective' world outside the organism, and could be described in terms of physical and social variables. On the other hand, the psychological environment referred to the 'subjective' world–the individual's perception, and constructions of the physical environment which could be described in terms of phychological variables. Lewin further stated:

" Even when from the standpoint of the physicist, the environment is identical or nearly identical for a child and for an adult, the psychological situation can be fundamentally different ... the situation must be represented in the way in which it is (real) for the individual in question, and is, as it affects him (Lewin 1936)."

A very significant contribution of Lewin's theory was its explicit theoretical formulation of the individual-environment relationship, which was explained as follows:

> Even if the laws of psychology were known, one could make a prediction about the behavior of a man only if in addition to the laws the special nature of the particular situation were known ... If one represents behavior or any kind of mental event by B and the whole situation including the consumer by S, then B may be treated as a function of S. B=f(S)....In psychology one can begin to describe the whole situation by roughly distinguishing the consumer (P) and his environment (E). Every psychological event depends upon the state of the consumer and at the same time on the environment, although their relative importance is different in different cases. Thus we can state our formula B=f(S) for every psychological event as B=f(P(E)) (Lewin 1936).

The modern interactionism approach has its roots in Kantor's views. He stated that "...no biological fact may be considered as anything but the mutual interaction of the organism and the environment (Kantor 1924)." Two years later he stated that the unit of study for psychology should be "...the individual as he interacts with all the various types of situations which constitutes his behavior circumstances (Kantor 1926)."

Modern interactionism can be regarded as a combination of personologism and situationism (Ekehammar 1974). It implies that neither the consumer nor the situation per se is emphasized, but the interaction of the two variables is the main source of behavioral variation (Endler 1975). This perspective may be generally expressed as B=f(P,E) which is very similar to Lewin's expression of the behavior in his field theory.

According to the above theories, the way the individual views the particular consumption situation determines the individual's specific want for that situation.

These needs vary across situations and influence the consumer's product and brand choice behavior.

In his extension of Lewin's field theory, Kassarjian (1973) stressed the need to study consumer brands, including both the individual's attitude toward the object in the situation and the influence of situational factors. He stated, " Analysis must begin with the situation as a whole from which the component parts can be differentiated. Instead of beginning with a study of the isolated elements, say in a purchase decision, one must first begin with the description of the situation as a whole. Only then is it possible to examine the specific elements and the interactions among the elements."

2.2 SITUATIONAL INFLUENCES

The first to directly investigate the concept of situational influence was Sandell (1968). He presented subjects with an inventory of beverages (coffee, water, wine, beer, brandy, liqueur, mineral squash, whiskey, and tea) and a list of drinking situations (after dinner, when alone, while reading the newspaper in the morning, when really thirsty, with a really delicious piece of meat) and asked subjects to rate their willingness to drink each beverage in each situation on a seven-point scale (ranging from extremely willing to extremely unwilling). The results demonstrated that personal differences and differences in situations, considered individually, were poor predictors of product preference. Their interaction, however, was a better predictor of beverage preferences.

Focusing on consumption situations for bread and pastries, Green and Rao (1972) gave subjects fifteen products with different attributes to choose from in six scenarios. The analysis revealed preferences for specific products in specific

situations, depending on the consumption situation and the product. Furthermore, a strong product-situation congruence was found.

In a series of experiments, Hansen (1972) investigated product choice in an expectancy-value context for different types of situations and products. He measured attribute value and perceived instrumentality both before and after providing situation descriptions of each experimental condition. Results showed some situational influence on the attitude component for menu and restaurant choice, but no effect on the outcome of the menu on the restaurant choice. Weak influence of the restaurant on the menu choice outcome was therefore reported.

Belk (1974a) engaged in a series of experiments utilizing the common approach of supplying subjects with a battery of general consumption situations and eliciting responses regarding purchases of specific products. In one study ten different products (e.g., food, fruits and snacks) were tested in ten different consumption situations. Through factor analysis three types of consumers , three product factors, and four situational factors were uncovered for the three-mode factor model. The results indicated that different types of consumers had different product factor preferences in different situational factors. An analysis of variance indicated that sixteen percent of the variance was explained by the product-situation interaction. In a single study of meat products, twenty-six percent of the variance was explained by product-situation interactions. The consumer-product interaction explained twenty-two percent of the variance in the snack study but only ten percent in the meat experiment. In both studies the main effect explained small variances, except for products in the meat study where it explained fifteen percent of the variance.

It is appropriate at this stage to analyze the meaning of product, consumer,

and situation main and interaction effects on product choice in a particular consumption situation. A consumer main effect means that consumers vary in average use of the products across situations. In other words, consumers have different usage rates across situations. A product main effect means that the utility obtained when the product is consumed varies across situations. A main effect of the consumption situation implies variation in average usefulness of the product across individuals in a consumption situation. Given products, consumers, and situations, we can have three two-way interactions: consumer-by-product, product-by-usage and usage-by-consumer. The consumer-by-product interaction means that different groups of people perceive different products to be useful across consumption situations. The product-by-usage interaction indicates that different products are considered useful across consumers for different types of usage situations. The usage-by-consumer interaction means that different people receive different utility when they consume products across situations. Finally, a three-way interaction, consumer-by-situation-by-product, means that different people use different products for different consumption situations.

Utilizing the method that he had used previously, Belk (1974b) analyzed responses for four different product categories–beverages, fast foods, leisure activities and motion pictures. All the main effects explained small variances, except for products. The product-by-situation and consumer-by-product interactions were significant in all but one study. The former was especially highly significant in the beverage study, where it accounted for forty percent of the variance. Three-way interactions were not obtained in any situation due to single presentations of each situation-consumer combination. In one of the previous studies–snack products–the three-way interaction was estimated but found to be insignificant, explaining only

less than four percent of the variance.

The validity of Belk's results was questioned by Lutz and Kakkar (1975), based on a study which partially replicated Belk's study. Subjects were randomly assigned to only one situation, instead of being exposed to all ten situations as in Belk's study. In their study only six percent of the variance was explained by the product-situation interaction. They suggested that "...demand characteristics were operating in Belk's experiment, causing subjects to exaggerate supposed shifts in consumption behavior across situations (Lutz and Kakkar 1975)." Demand characteristics were determined as "...those aspects of a study which gives the participants clues about what behavior is expected or demanded of them (Kakkar and Lutz 1980)." This implies that when respondents are exposed to all ten consumption situations, they could guess the purpose of the study and attempt to help the researcher by providing the answers they thought were expected of them. In this sense the results may have been exaggerated. The above situation (of demand characteristics) is avoided when each respondent is exposed to only one consumption situation.

The question of whether demand characteristics were operating in Belk's experiments was investigated experimentally by Reingan (1976). One group was informed of the study's purpose and therefore was aware of the experimenter's expectations, whereas the other group was not and served as a control condition. Two other groups were asked to confirm or disconfirm the experimenter's expectations. The strongest product-situation interaction was shown by the control group which had the largest percentage of respondents who were aware of the experimenters' hypotheses. Therefore, the results showed some evidence for the possible invalidity of these types of product/situation batteries. Hence:Reingan's conclusion: "...while the results render very little evidence in favor of a negative subject role and more

over-all evidence in support of a compliant subject role interaction, this study does not provide conclusive evidence as to the specific effects of operating demand characteristics in the conventional assessment of situational variables."

Batteries and paper towels were used as object stimuli by Shanteau and Ptacek (1977) to investigate the influence of several situations on the probability of use and purchase. Some concern about the order of presentation in these batteries was raised because results revealed that subjects integrated prior information exposed in the experimental task into later decisions. Both studies, however, revealed agreement on the importance of the situation in consumer choice.

All but one of the above-mentioned studies focused on product choice and not on product purchase or usage. The only study which focused on product usage (Sandel 1968) used willingness to consume the product in a given consumption situation as the criterion variable.

In an exploratory study, Srivastava, Shocker, and Day (1978) tried to develop a situational typology that could account for a comprehensive array of usage situations. They chose the breath freshener market, and examined forty-six products in eighteen situations. The appropriateness of product usage in different consumption situations was measured. A principal component analysis gave three factors (accounting for 52 percent, 35 percent, and 6 percent of the variance, respectively). The authors included only the first two (social versus consumeral concern, away versus at home) and two additional situational dimensions (risk of being noticed, amount of time to prepare). Employing visual clustering, they derived usage situations and product clusters based on patterns of factor loadings and factor scores, respectively. The results showed evidence of the social importance of the product-situation relationship and revealed a situational influence on that relationship and

the perceived appropriateness of product usage. It also revealed that respondents had homogeneous feelings about the appropriateness of specific product-situation combinations.

A very similar method was used by Srivastava (1980) in his study of the market structure of the financial services. Again appropriateness of product usage in a particular situation was examined. The results showed that the appropriateness of services in a given situation was relatively stable across situations.

The homogeneity of the responses provided further support for using consumption situations as a basis for segmenting the market. In both situations the products were substitutable. The appropriateness, however, of products in the specific situation was not influenced by the consumers' subjective interpretation of the situation but mostly by the availability of the product in the specific situation. In Srivastava's (1980) study, very few of the services would be appropriate if, for example, one were in the situation "while out of town over the weekend you have some unexpected problems with your car. The repair bill is about $100 and must be paid immediately so you can continue on your drive back home." Only three–cash on hand, traveler's checks, and bank credit cards–out of the twelve financial services would be readily available and, hence, more appropriate. If, however, you one in another situation, "you finally decide to purchase a typewriter when you spot the model you wanted at a special sale in a department store (sale price - $155)" a different set of services such as retail credit cards, checking and NOW account usage modes would be available and, thus, appropriate.

The availability of the product was less apparent in the Srivastava et al. (1978) study on the analysis of breath freshener products. The factors used–away versus at home, and risk of being noticed–greatly influenced the availability of a product.

When away from home one will have different products than when at home. At home one can always use toothpaste without being noticed, something not easily achieved when away from home. The availability of the product will have an influence on the appropriateness of using it in the consumption situation. The psychological factor also is important here. The factors–social versus consumer concern, and the risk of being noticed–will receive different psychological interpretations and have a different effect on the appropriateness of the product. Therefore, the final outcome will be determined by the interaction of availability and psychological interpretation of the situation.

In this research, which uses the beverage market in almost all possible consumption / situations, the products are available and the determination of usage is influenced very little, if at all, by availability of the product.

The focus of this review up to now has been on studies where the frequency of the consumption situation was not taken into account. The frequency of the occurrence of the consumption situation influences the size of the market segment. This section reports on studies that incorporate the frequency of occurrence.

An investigation by Berkowitz, Ginter and Talarzyk (1977) examined the effects of specific usage situations on the prediction of automobile purchases. Data were collected through a mail questionnaire from respondents who had purchased the following new automobiles: Oldsmobile Cutlass, Volkswagon Dasher, Audi Fox, or Plymouth Duster. Nine different attributes (style and appearance, miles per gallon, riding comfort, durability, etc.) were examined in six different usage situations (driving around town by husband and wife, shopping and family errands, pleasure driving). It was found that situation-specific attribute ratings alone were insufficient to increase the predictive accuracy of past choices. The results have an

intuitive meaning because few people will buy cars for one specific usage situation. They usually buy cars for all occasions, with particular attributes that satisfy their most important usage situation. Results supported the hypothesis that individuals who used a car almost totally in one situation considered the important attributes in that situation as the overriding elements in purchase behavior. It was further demonstrated that segmenting buyers into two categories based on product usage in specific situations improved the explanation of brand choice.

Several other studies–Bearden and Woodside (1976, 1977), Woodside, Bearden and Clokey (1977), Miller and Ginter (1979) and Warshaw (1980)– also incorporated the frequency of the situation. These studies will be analyzed in the next section as they are more relevant to the situation-attitude relationship which will be discussed next.

2.3 CONSUMPTION SITUATIONS AND ATTITUDES

Researchers seeking to answer the question – "What determines behavior?" – have examined individuals' attitudes. It was believed that knowledge of one's attitudes should result in accurate prediction of one's behavior. The underlying premise was that, if a consumer's attitude toward a product is favorable, then the consumer will behave favorably toward that product (buy or use it).

Examination of the attitude-behavior relationship, both in psychology and marketing, yielded the conclusion that attitudes were poor predictors of overt behavior. (Ajzen and Fishbein, 1969, 1972; Wicker,1969; Day, 1973; Brislin and Olmstead, 1973 and Vroom, 1964).

Despite repeated failures to demonstrate a strong relationship between attitude and behavior, the basic assumption that human behavior is determined by

attitudes persisted.

Rokeach (1967) and Wicker (1965) suggested the situational variable as a way of improving the relationship. According to Rokeach (1967), this relationship could be viewed as attitudes toward objects, which assumes across-situation consistency, and as attitudes toward situations, which assumes across-object stability. A successful model for the attitudinal prediction of behavior is the Fishbein/Ajzen model (Fishbein 1967; Fishbein and Ajzen 1975). This model can incorporate not only the objective situation but also some of the subjective psychological influences. The former is achieved through the definition of behavior, which is a specific act, performed in a specific context. The measured attitude toward performing the specific act is then combined with a normative factor to predict intentions and actual behavior. The normative factor, in a broad sense, is the subjective interpretation of the appropriateness of performing the behavior. The theory of reasoned action, (Fishbein/Ajzen 1980), an extension of the Fishbein/Ajzen model, has been widely examined and utilized in marketing.

A situation-specific attitudes model was compared against a general attitude model by Miller (1975), in a study on the choice of fast food restaurants. It was found that the former outperformed the latter in predicting brand choice but not in predicting preference.

In a more detailed study, Miller and Ginter (1979) tested the following hypotheses: 1) purchase levels of specific brands vary across situations; 2) attribute importance varies across situations; 3) perception of different brands varies across situations; and 4) situation-specific measurement of attribute importances and perceptions improves prediction of brand choice over nonsituational measurement. The product category included eight fast-food restaurants (Arby's, Wendy's, McDon-

ald's, Burger King and others). Group interviews determined the seven most important attributes which consumers use to differentiate fast food restaurants. The attributes were speed of service, variety, cleanliness, popularity with children, convenience, taste and price. Four situations (eating occasions) were selected (lunch on a weekday, snack during a shopping trip, evening meal when rushed for time, and evening meal with the family when not rushed). Mail panel data were collected. Each respondent indicated attribute importances and the perceived location of brands in a nonsituational format and for each occasion. Self-reported purchase behavior was collected for each eating occasion. The first three hypotheses were supported while the fourth was partially confirmed.

Bearden and Woodside (1976) tested the hypothesis that the prediction of behavioral intentions toward various brands of soft drinks could be improved by adding a situational component to attitudinal measures. The situational measure had three components: a) likelihood of the situation occurring for the consumer; b) likelihood of the consumer using the product in the situation; and c) likelihood of the consumer using brand j in situation i. Data collected on five brands of soft drinks and seven situations showed that the situation measure substantially increased the coefficient of determination (R-squared). Bearden and Woodside's framework assumed, however, that attitudes do not vary across situations.

A similar survey (Bearden and Woodside 1977; Woodside, Bearden and Clokey 1977) added four beer brands to the original five soft drink brands. Subjects were male heavy beer users and female soft drink users. The study focused on product choice and utilized the same conceptualization. Employing the criterion, behavioral intentions toward brand, the study found that specific situational components explained twenty to thirty percent of the variance.

The above theoretical and research evidence leads to the overwhelming conclusion that situation is a very influential factor in the consumer choice process and can possibly be used as a segmentation base. The importance of the consumption situation should not, however, be overestimated. It is not the sole determinant of consumer choice. The consumer's individual characteristics are also important. According to Lewin's field theory and the interactionism approach, the consumer and the situation are major determinants of the actual behavior. Each individual views the situation differently, which effects the choice. Each consumer brings his/her characteristics to the consumption situation and must be considered when actual behavior is analyzed. Consumers' individual characteristics have never been considered in any study examining situational influences on consumer behavior.

The importance of the characteristics of consumers was supported by Myers and Tauber (1977), who advocated that consumer wants, usage patterns, and perceptions and the evaluation of competing alternative products are basically determined in three factors: a) products, through the benefits that they deliver; b) the characteristics of consumers; and c) consumption situations or occasions.

Srivastava, Shocker and Day (1978) showed that consumers respond homogeneously to competing and substitutable products. A successful market segmentation strategy requires a description of the individuals with homogeneous responses. This can be accomplished by utilizing consumers' characteristics, such as demographic, socioeconomic, and life-style variables.

2.4 CONSUMPTION SITUATIONS DEFINED

It is important to precisely define consumption situations, as they are vital to this research and influence all aspects of this research. The above literature

review considered only studies that focused on product choice, usage and consumption, even though situation was used in other aspects of consumer behavior such as communication (Park and Bahr 1980), consumer decision making and satisfaction (Capon and Burne 1977), involvement (Houston and Routhschild 1978, 1980), risk and risk perception (Spence, Engel, and Blackwell 1970; Hirsich, Dornuff, and Kernan 1972; Vincent and Zikmund 1976); consumer behavior models (Howard 1963; Nicosia ; Howard and Sheth 1969) and selling (Bagozzi 1978; Grossbart, Amedeo and Chinchen 1978; Kotler 1973; Markin, Lillis and Narayanna 1976; Nord and Peter 1980).

The definition of the consumption situation requires the determination of variables that constitute the situation. Determination of these variables is not universally accepted, despite a long debate in the literature (Barker 1975; Belk 1974, 1975a, 1975b, 1976; Lutz and Kakkar 1975, 1976; Russell and Mehrabian 1976; Wicker 1975).

There are basically two main streams of views about the determination of these variables. Belk proposed a behavioral approach which defines the situation with objective criteria. Lutz and Kakkar along with Mehrabian and Russell argued for a psychological determination of the variables.

In this research the objective is to identify market segments. Since objective criteria seem to provide stable segments, Belk's definition is adopted here. He defined five situational variables: 1) physical surroundings, 2) social surroundings, 3) temporal perspective, 4) task definition, and 5) antecedent states. This research utilized only three of the factors (social, physical surroundings and task definition) for consumption situation determination. The inclusion of the temporal perspective and antecedent states can increase drastically the number of consumption situations

and can result in managerially less meaningful segments. It is further believed that these three variables are sufficient to determine the effect of the situation on consumer behavior. This point was made by Frederiksen (1972) who argued that since not all aspects of the situation affect behavior, it is pertinent to focus only on those aspects of the situation that do influence behavior. The consumption situations defined as social surroundings, physical surroundings and task definition, in fact, do capture the effects on consumer behavior (choice of drink in the situation).

Most of the literature on the situational influence appears to be concerned with theoretical issues related to consumer choice. Emphasis on the implications for marketing research and management has been limited, with the exception of Srivastava (1980), and Srivastava, Shocker, and Day (1978), who were the first to explicitly incorporate managerial considerations in designing and executing their studies. This study follows some of the suggestions of Srivastava (1980) by accounting for managerial marketing implications in defining the situations.

Hansen (1972) distinguished the situation in the consumption situation, purchase situation and communication situation. Belk (1978) argued that this situational taxonomy is useful but stated "...it is potentially misleading since we will normally be interested in consumer purchase behavior in all three types of situations. In communication situations, we are most often interested in the effect of advertising or other communication (and attendant situational conditions) on future product choice behavior; and in the case of consumption situations we are most often interested in the effects of consumption situational conditions on prior product choice behavior. Hence, by focusing on a purchase effects of anticipated consumption situations, we are dealing with situational influences that the consumer can and does give as reasons for a purchase selection." The position that Belk expresses is

only partially relevant to our concern with products which are frequently consumed in a variety of situations, such as, beverages. He was concerned with durable goods, small appliances and clothes. Purchase was important because the product was bought once, and afterwards the situation would influence how often the product may be used. Thus, the usage situation had very little or no importance after the product was purchased.

In frequently purchased products (brands), however, the consumption situation heavily influences the perceived appropriateness of the product under consideration and, hence, its purchase. The actual consumption situation would determine which product would be consumed, and the purchase would occur with the anticipated consumption situation in mind.

The purpose of the study is another important factor to consider when answering the question of what situation to use. Day, Shocker, and Srivastava (1979) argued that "...the questions of how to identify product-market boundaries cannot be separated from the way the results are to be used." An objective of this study is to identify groups of customers who homogeneously view the appropriateness of products (brands) in a consumption situation. Further, these results will be used for communication strategies, which are going to advocate that certain brands/products are suitable for consumption in a particular situation. Given these objectives, the selection of the consumption situation, therefore, is further supported. Also, a need for developing a taxonomy of the consumption situations is in order. Three different approaches have been developed for reaching this goal.

Belk (1975), utilizing a methodology proposed by Barker (1968), tried to classify consumption situations on the basis of the behavior elicited by them. He presented a battery of ten situations and ten choices to subjects. Factor analysis yielded

four situational factors identified as variety seeking, entertaining, picnicking, and informal relaxation seeking. This approach developed behavioral dimensions. A similar approach was taken by Srivastava, Shocker and Day (1978) and Srivastava (1980).

A second approach, developed by Mehrabian and Russell (1974) created general perceptual dimensions by recording the levels of pleasure, arousal and dominance that the subjects experienced in the situation. Pleasure referred to the degree of happiness and satisfaction derived by subjects in the situation. Arousal was an assessment of how stimulating the situation was to the subject, while dominance was the degree of control the subject felt in a particular situation.

Finally, a third approach was developed by Kakkar and Lutz (1975). Each respondent rated the situations on eleven specific perceptual characteristics that could be meaningfully combined into three global dimensions of social interaction, consumeral involvement and temporal commitments.

The first approach was preferred because it employed behavioral responses directly related to managerial decisions. The importance of the behavioral responses was supported by Srivastava and Albert (1982), who stated that "...it would be useful to employ multiple measures, particularly those related to what products people actually do select or consider under different situational conditions rather than what they think they could or would do."

Belk (1979) argued that the viability of a general taxonomy of situations is doubtful, since the situational influence in the behavior varies across different product choices. Instead, he proposed four criteria for taxonomies: product specification, consumer relevance, aggregation potential and decision-making relevance. A product-specific taxonomy, he argued, is not only more feasible, and more man-

ageable, but also more useful than a general taxonomy. He added that a taxonomy of consumption situations is best approached at the product-class level because consumption situations are infinitely diverse across products. The second criterion implies that the taxonomy is related to the consumers' actual behavioral differences across situations. The third criterion of aggregation potential is important, especially in the context of this research. He stated:

> The third criterion (that a consumption situation taxonomy has aggregation potential) assumes that individual differences will exist in the consumer behaviors which covary with various situational conditions in a consumption category. Given this consumption, the criteria call for sufficient homogeneity of situational effects across consumers that most of the situation or situational condition types in the taxonomy affects most of the consumers in a similar manner. With data on consumer responses to a variety of situations, it is an empirical question whether there is sufficient homogeneity of effects for a common situational taxonomy or whether several segments of similar consumers need to be treated separately...(it) requires that a typology have some generality beyond applying to a single individual with idiosyncratic responses to situations. This means that both the situations or situational variables, and the effects of these conditions on consumer choice must be shared.

The last criterion demands an actionable consumption situation taxonomy. He suggests that "Ideally an identified situational response pattern could be translated into a marketing strategy by designing a product offering and marketing program directed at a particular type of use situation for which few other offerings are seen by consumers to be appropriate."

This study satisfies all the above requirements of the situational taxonomy and is product-specific (beer, wine) and includes behavioral measurements of the consumer response. The consumers have been asked to recall what products they use in a particular situation. Furthermore, it has aggregation potential. And finally,

		Customer Characteristics	
		General	Situation Specific
Measures	Objective	(1) Demographic Factors (Age, Stage in Life Cycle, Sex, Place of Living, Etc.) Socioeconomic Factors	(3) Consumption Patterns (Heavy, Medium, Light) Brand Loyalty Patterns (Brands,Stores) Buying Situations
	Inferred	(2) Personality Traits Life Style	(4) Attitudes Perceptions and Preferences

Table 1: Classification Scheme of Variables for Market Segmentation

the consumption situations have decision-making relevance, which are going to used for market segmentation and positioning strategies.

2.5 CONSUMPTION SITUATION AS A SEGMENTATION BASE

Many variables have served as segmentation bases in various segmentation models (Wind 1978). These bases have been divided into two categories–general-consumer characteristics and situation-specific characteristics (Frank, Massy, and Wind 1972). Furthermore, measures have been classified as objective or inferred. Table 1 shows the classification scheme of alternative bases of market segmentation.

A more exhaustive list was developed by Kotler (1984) (see Table 2), who uses geographic, demographic, psychographic and behavioral categories. The similarity

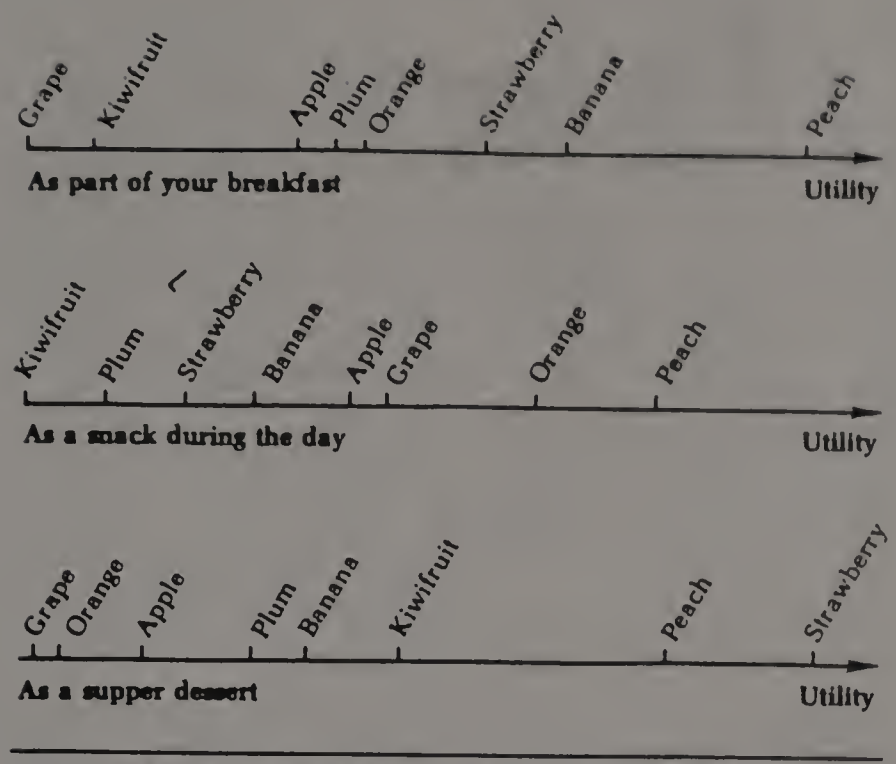
VARIABLES	TYPICAL BREAKDOWNS
GEOGRAPHIC	
Region	Pacific, Mountain, Central, Pacific, New England
County size	A,B,C,D
City or SMSA size	Under 50,000, 50,000-99,999, 100,000-249,999 250,000-499,999, 500,000-999,999 1,000,000-3,999,999, 4,000,000 or over
Density	Urban, suburban, rural
Climate	Northern, Southern
DEMOGRAPHIC	
Age	Under 11, 12-19, 20-34, 35-49, 50-64, 65+
Sex	Male, Female
Family life cycle	Young, single; young, married no children; young, married with children; older, married with children; older, single; other
Family size	1-2, 3-4, 5+
Income	Under $10,000, $10,000-$25,000, $25,000 and over
Occupation	Professional and technical; managers, clerical, sales; farmers; retired; students; housewives; unemployed
Education	Grade school or less; some high school; graduated high school; some college; graduated college
Religion	Catholic, Protestant, Jewish, other
Race	White, black, oriental
Nationality	American, British, French, German, Canadian Scandinavian, Italian, Latin American, Japanese
Social class	Lower, Low-Middle, Upper-Middle, Upper
PSYCHOGRAPHIC	
Life style	Straights, swingers, longhairs
Personality	Compulsive, gregarious, authoritarian, ambitious
BEHAVIORALISTIC	
Purchase situation	Regular occasion, special occasion
Benefits sought	Economy,convinience, prestige
User status	Nonuser, ex-user, potential user, regular user
Usage rate	Light user, medium user, heavy user
Loyalty status	None, medium, strong, absolute
Readiness stage	Unware, Aware, Informed, Interested, Desirous, Intented
Marketing-factors	Quality, price, service, advertising, sales
sensitivity	promotion

Table 2: Major Segmentation Variables

between Kotler's (1984) and Frank, Massy, and Wind's (1972) classification schemes (what may be called "descriptor variables") is evident. Demographic, geographic, socioeconomic, and consumerality variables were the first to be used as bases for segmentation.

Despite extensive research on the influence of consumption situations on behavior, consumption situations have received very little attention as bases for segmentation. Hustad, Mayer and Whipple (1975) undertook a segmentation study for beverages, utilizing the usage contexts. They also introduced the idea that consumption situations as bases for segmentation are appropriate for some products (nonalcoholic beverages), but not for others (toilet tissue). For toilet tissue products, the number of usage contexts may be unique and have the same influence on all consumers; and hence, yield an inappropriate determinant of segmentation. They demonstrated that the ideal beverage and importance of product attribute differ according to usage context. Their results, however, had little practicality because market segments could not be identified and therefore were inaccessible. The importance, however, of the consumption situation was strongly supported.

The measure of the consumption volume by need was studied by Stout, Suh, Greenberg and Dubow (1977). They utilized the patterns of needs satisfied in consumption occasions as the bases for segmentation. They attempted to create marketing strategies oriented toward segments of needs rather than segments of people. They believed that consumers drink soft drinks because of the frequency and intensity of their thirst, the basic need. The volumetric distribution of each need, and each brand's volume share allocated to each need were measured. Further, the situation incidences were cluster analyzed and ten groups were identified. The twenty-five needs were associated with the ten groups of consumption incidences.



*The three interval scales are not anchored to the same origin. This means that only the relative positions of the fruits can be compared.

Figure 1: Students' Fruit Utility Structures by Three Consumption Situations

Associations of particular needs and consumption occasions could have been identified but were not undertaken. The large number in the consumption incidents group and the large number of needs (twenty-five) made the outcome of the study managerially meaningless because each need associated with an incidence cluster base was quite small and insignificant for managerial consideration of marketing positioning.

Five years later, Greenberg (1982) reviewed the conceptual framework, according to which the total population was segmented by needs or benefits and each emerged segment was divided into other subsegments based on occasion-based needs/benefits. This framework has two potential problems. First, since the consumption situation determines the needs/benefits desired, one must first segment the market by consumption situation and then try to identify benefits to further

subdivide the market. Second, due to low profitability, the resulting small segments are not managerially important.

Finally, Dickson (1982) conducted an experiment asking people to give their pairwise preferences for eight different types of fruits in three different consumption situations. The consumption settings were breakfast, snack during the day, and dessert at suppertime. The results (Figure 1) indicated that different fruits have different utility depending upon the consumption situation, thus, further supporting the use of consumption situations as bases of segmentation.

CHAPTER III

METHODOLOGY

3.1 INTRODUCTION

This chapter first discusses the specific research issues and hypotheses derived from the general review of the literature provided earlier. A second section discusses the methodology employed in testing the hypotheses. Finally, a description of the latent class models analysis and Goodman's approach to logit analysis is presented.

3.2 RESEARCH OVERVIEW

In a review of the importance of situational influences, Leigh and Martin(1981) argued that situation is more important than was originally believed and should be given even greater attention in the future. They added that "...the concept of situation and its possible influence on consumer behavior are considered to be applicable and relevant to most areas within marketing."

The primary purpose of this research was to investigate the interaction effects among consumers' characteristics, consumption situation, and products chosen/consumed.

The principal research question was whether the two-way interactions of product by consumption situations and product by consumer characteristics are adequate to determine product choice, or whether the three-way interaction among products, consumer characteristics, and consumption situations is needed. The variables to be analyzed were alternative products, consumption situations and the consumers' individual characteristics.

Leigh and Martin(1981) suggested that only relevant consumer situations be investigated rather than all situations. Unfortunately, not all research has taken into consideration the frequency with which the person is in the situation. In this study, data were analyzed for individuals who were frequently or occasionally in a particular situation. Responses from individuals who were rarely or never in a particular consumption situation were eliminated.

3.2.1 Consumption Situation

Consumption situations are defined here according to the behavioral approach(Belk 1974). This determines the situation with objective criteria, which create objective and stable consumption situations not only across individuals but also across time. Objective and stable situations are necessary for the consumption situation to be useful for the marketing manager.

The two psychological approaches(Mehrabian and Russell 1974, Kakkar and Lutz 1975) utilize general perceptual dimensions and specific perceptual characteristics resulting in unstable consumption situations not only across individuals but also across time. This occurs because the level of pleasure, arousal, and dominance, along with social interaction, personal involvement, and temporal commitments, will vary across time, even for the same individual.

Belk suggested the following five characteristics to define a consumption situation:

1. Physical surrounding.
2. Social surrounding.
3. Task definition.
4. Time.
5. Antecedent states.

Only the first three characteristics–physical and social surrounding, and task definition–were utilized and considered sufficient for the definition of a stable situation across individuals and time. The inclusion of the last two would create too many and less stable consumption situations with less meaningful managerial implications.

Secondary data were used in this study. The complete set of data contained responses for seventeen consumption situations(see Appendix A). A set of the following six situations was selected for the final analysis:

1. Dinner at home with friends.
2. Non business dinner at a restaurant.
3. Parties outside home.
4. Night club or disco.
5. Picnic or barbeque.

6. Sporting events.

Based both on past experience and a preliminary analysis of the frequencies of product choice in all situations available in the data base, a subset of consumption situations was selected so that they were maximally different. Thus, in situations(1,2) wine is heavily consumed. In situations (5,6) beer is heavily consumed, and in situations (3,4) wine and beer are almost equally consumed.

3.2.2 Products Chosen

The original survey data included all beverages, alcoholic and nonalcoholic, as an acceptable product choice response. In this study two alcoholic beverages, wine and beer, were selected for the analysis. These alcoholic products were selected because the appropriateness of consuming these products in a particular consumption situation is heavily influenced not only by the situation but also by the person's individual characteristics. In other words, individual characteristics influence the subjective interpretation of the consumption situation determining the appropriateness of products consumed. Only responses from consumers who selected wine or beer in the above list of consumption situations were included in the analysis.

3.2.3 Consumers' Characteristics

Appendix A includes the questionnaire used to collect the data. The last section of the questionnaire contains questions about demographic and psychographic characteristics. These are sex, age, marital status, education, occupation, spouse's employment, spouse's occupation, and the area where they live; how often they go to movies, concerts, plays, ballet, professional games, and college sporting events;

whether they participate in athletic activities, or belong to a club; how much TV they watch and how many books they read in a month; and whether they have moved in the past three years and in what state they previously lived.

3.3 DEVELOPMENT OF HYPOTHESES

In this section of the study, the hypotheses are developed, and the rationale for each hypothesis is explained. The preceding review of the literature on situational influences on consumer behavior leads to the development of the following hypotheses.

Hypothesis One

HO1: There is a significant three-way interaction among consumers' characteristics, products, and consumption situations.

This means that different people use different beverage products in different consumption situations. Wine drinkers drink wine in a subset of consumption situations and have different demographic and lifestyle profiles than beer drinkers, who drink beer in a different set of consumption situations. In all previous studies except one, the three-way interaction was assumed to be nonsignificant. These studies indicated that a large percentage of the variance, as high as forty-six percent (Bishop and Witt 1970), was unexplained by two-way interactions. The only study (Belk 1974b) which investigated the three-way interaction revealed a very small percent of variance to be explained by the interaction.

The argument here is for a significant three-way interaction. This position is taken because the product choice is influenced by consumption situations and the person's characteristics. Different products are viewed as more appropriate than others for particular consumption situations. Alcoholic beverage consumption

is a dynamic situation where psychological factors are significant. The person's characteristics are influencing not only the evaluation of the actual consumption situation, but also the appropriateness of a product for the particular consumption situation.

Consumers with different demographic and lifestyle characteristics view different products as being appropriate for consumption in a variety of situations. Consumers with high income and a college education may view product A as appropriate for a subset of consumption situations and actually consume product A in these situations. Consumers with low income and a high school education may view product B as appropriate for another subset of consumption situations and actually prefer product B in these consumption situations.

Those who consume product A in a subset of consumption situations can be viewed as one market segment, while those who consume product B in a different subset of consumption situations can be considered as another market segment.

Hypothesis Two

HO2: There is significant interaction between products and consumption situations.

This hypothesis implies that different products have different utilities in various consumption situations across individuals. Wine may be consumed in consumption situations 1,2 and 3, while beer may be consumed in situations 5 and 6. The hypothesis is supported by previous research. Sandell (1968) found that the interaction of product and situation explained forty percent of the variance of the products chosen in a specific situation. Green and Rao (1972) further supported this position with their bread and pastries experiment. Furthermore, Belk (1974a, b), in a series of experiments, demonstrated a statistically significant interaction between products as responses and situations, explaining from seven percent (motion

pictures) up to forty percent (for beverage products) of the variance. Additional support for the hypothesis was provided by Srivastava et al. (1978) and Dickson (1982). The former study revealed that consumers had similar feelings about the appropriateness of specific products in various situations. The latter demonstrated that the level of utility obtained from the consumption of various fruits was influenced by consumption situations.

Hypothesis Three

HO3: There is a significant interaction between consumers' characteristics and products.

This hypothesis implies that different groups of people perceive products to be useful in the same consumption situations. Wine drinkers have different profiles than beer drinkers. This hypothesis is supported by Belk (1974a, b) and Sandell (1968). The former found that the person-product interaction explained from ten percent up to thirty-four percent of the behavioral variance. The latter demonstrated in an experimental setting that the person-product interaction accounted for twelve percent of the behavioral variance.

Hypothesis Four

HO4: There is a significant interaction between consumers' characteristics and the consumption situations.

This hypothesis implies that utility received by consumers varies with their consumption situations. In this research, it means that different groups of people receive varied utility across different consumption situations. People drink wine in consumption situations 1 and 2 because they receive more utility from drinking wine than drinking beer.

Lewin's field theory and the interactionism approach support this hypothe-

sis. Both approaches view individual behavior as a function of the person and the environment. In this study environment denotes the consumption situation. The behavioral variance explained by the person-situation interaction is expected to be low. This is supported by several studies. (Sandell 1968; Belk 1974a, b).

The field theory and interactionism approach advocate that the individual subjectively interprets the situation. The person brings his or her specific characteristics into the situation, which influences his/her subjective interpretation of the situation. A person's characteristics thus need to be considered when person consumption-situation interactions are analyzed. Unfortunately, few of the above studies have considered the consumer's characteristics in this manner.

3.4 DATA COLLECTION

This study utilized secondary data collected by a research corporation for a national magazine in September of 1981. Telephone interviews (see Appendix A for the questionnaire) were administered to alcoholic beverage-consuming adults, between the ages of 21 and 54. Respondents had at least two drinks of an alcoholic beverage in an average week and 'upscale' incomes. 'Upscale' was defined for adults in the 21-34 year age bracket as those having household incomes of $18,000 a year of more, and in the 35-54 year bracket as those incomes of $25,000 a year or more. As many as 1,000 interviews were conducted. Approximately 250 were administered to men and 250 to women in each age bracket. The interviews were conducted in the 20 continental United States markets which rank at the top in liquor and wine case sales. Fifty interviews, distributed across age and sex in roughly equal proportions, were made in each market. The 20 markets were from four geographical areas: Northeast, North Central, South, and West.

Respondents for this study were chosen by random selection of residential telephone numbers in the greater metropolitan telephone directories covering each of the 20 markets. In one-tenth of the listed numbers selected, the last two digits were reversed to ensure that the consumers with unlisted numbers had an equal likelihood of being interviewed. To complete the 1,000 interviews, 4,725 respondents were screened. Those who qualified as consumers were asked to identify each beverage-consuming situation in which they are involved frequently, in an average month(or, in some cases, year). 'Frequently' and 'occasionally' were based on the subjective perceptions of the consumer; they were not defined by a specific number of times per month or year. Respondents who were frequently or occasionally in the consumption situations were further interviewed. They were asked to name the beverages they usually drink in each situation, unaided by a prompting list of beverages. Respondents were allowed to give more than one choice in every consumption situation. Consumers were also asked to specify if and how their beverage preferences in each situation have changed over the last three years and (unaided) the reasons for any change. Finally, respondents' demographic and psychographic characteristics were recorded.

3.5 METHODOLOGY

All hypotheses are tested by analyzing a three-way contingency table. The most influential demographic and psychographic variables will be coded as dichotomous categorical variables and cross-classified six at a time to create 2x2x2x2x2x2 contingency tables. (See Appendix B for an example of a 2x2x2x2x2x2 table). Six characteristics were cross-classified at a time because there actually were only 1000 respondents(the same) in all situations. With six dichotomous variables there are

Situation 1

PROFILES	PRODUCT	
	WINE	BEER
1	n_{11}	n_{12}
2	n_{21}	n_{22}
3	n_{31}	n_{32}
4	n_{41}	n_{42}
5	n_{51}	n_{52}

Situation 2

PROFILES	PRODUCT	
	WINE	BEER
1	n_{11}	n_{12}
2	n_{21}	n_{22}
3	n_{31}	n_{32}
4	n_{41}	n_{42}
5	n_{51}	n_{52}

.
.
.

Situation 6

PROFILES	PRODUCT	
	WINE	BEER
1	n_{11}	n_{12}
2	n_{21}	n_{22}
3	n_{31}	n_{32}
4	n_{41}	n_{42}
5	n_{51}	n_{52}

Table 3: Situation by Products and Profiles

64 cells. Thus, there are about fifteen individuals per cell(on the average), which was sufficient. These tables will be analyzed utilizing latent structure analysis to identify profiles (latent classes). Unrestricted latent class models will be fitted to tables to find the one that best fit the data. It is hypothesized that more than one latent class explains the underlying association of the observable demographic and psychographic variables. The size of the latent classes (unconditional probabilities) are estimated along with the conditional probability of an individual belonging to a particular latent class given that s/he is at a level of an observable variable. All individuals are assigned to a latent class, uncovered by the MLLSA program, which forms the first variable in the final three-way contingency table. The second variable is the product choice at two levels (wine, beer), and the third variable will be the consumption situation. Six situations have been selected in a way that they are maximally different; i.e., dinner at home with friends, parties outside home, night club or disco, picnic or barbecue, sporting events, at home after dinner with friends, and non-business dinner at a restaurant. The constructed table is a 6X2X6 three-way contingency table with profiles at six levels, product at two levels and situations at six levels. This table can also be viewed as a 6X2 two-way table, one for each situation. Table 3 illustrates these tables. All hypotheses were tested by examining the 6X2X6 contingency table using logit analysis.

3.6 LATENT CLASS ANALYSIS

This section begins with a description of the basic latent class model. First, the logic behind the latent structure analysis is explained. Then the basic model is described. Finally, identification and goodness-of-fit are examined.

3.6.1 Basic Latent Class Model

Latent structure analysis was first introduced by Lazarsfeld (1950) thirty-five years ago. The basic notion is to introduce one or more latent variables which will account for the association among a set of observed variables. The method can be viewed as a data-unmixing procedure (Lazarsfeld and Henry 1968). It tries to identify homogeneous groups from the total heterogeneous group. It is very appropriate for the analysis of categorical data, where the variables exhibit some association.

The applicability of latent structure analysis was hindered by the estimation procedure. Lazarsfeld and Henry (1968) proposed an estimation procedure which was, however, complex and did not provide any goodness-of-fit test. The innovative work of Goodman (1974a, b) provided us with a workable and flexible mathematical estimation procedure. Goodman's approach obtains maximum likelihood estimates of the latent proportions and latent probabilities. Clogg (1977) developed a general purpose computer program for maximum likelihood latent structure analysis, called MLLSA. The program will be used to test the hypotheses.

3.6.2 Basic Model

The basic latent class model will be described in the context of a three-way multidimentional table formed by the cross-classification of observed variables A, B, and C. Let Π_{ijk} denote the expected proportion of individuals in the (i, j, k) cell of the AxBxC table. Suppose an unobservable variable X, having T levels, exists which can explain the observed relationship among the variables A, B, and C. Then

the following relationship is true:

$$\Pi_{ijk} = \sum_{t=1}^{T} \Pi_{ijkt}^{ABCX} \tag{1}$$

Π_{ijkt}^{ABCX} denotes the expected joint probability in the (i, j, k, t) cell of the indirectly observable AxBxCxX table, and can be expressed as follows:

$$\Pi_{ijkt}^{ABCX} = \Pi_{t}^{X} \Pi_{it}^{\bar{A}X} \Pi_{jt}^{\bar{B}X} \Pi_{kt}^{\bar{C}X} \tag{2}$$

where Π_{t}^{X} denotes the probability that an individual will be in class t of latent variable X.

$\Pi_{it}^{\bar{A}X}$ is the conditional probability that an individual will be at level i on variable A, given that he is at level t on the latent variable X.

$\Pi_{jt}^{\bar{B}X}$ similarly indicates the probability that an individual will be at level j on variable B, given that he is in the tth level class of the latent variable X.

$\Pi_{kt}^{\bar{C}X}$ is the probability that a person will be at level k on the observable variable B, given that he is in the tth level class of the unobservable variable X.

If equation eq.2 is substituted into eq.1, eq.3 is obtained, which is the fundamental equation of latent structure analysis.

$$\Pi_{ijk} = \sum_{t=1}^{T} \Pi_{t}^{X} \Pi_{it}^{\bar{A}X} \Pi_{jt}^{\bar{B}X} \Pi_{kt}^{\bar{C}X} \tag{3}$$

Π_{t}^{X} gives the percentage of the population in the tth latent class of latent factor X.

$\Pi_{it}^{\bar{A}X}$, $\Pi_{jt}^{\bar{B}X}$ and $\Pi_{kt}^{\bar{C}X}$ give the distribution of the particular manifest variable within each latent class.

Equation eq.3 indicates that if a person is in latent class t, his responses on the observable variables will be mutually independent. This indicates that the latent variable X explains the association among the manifest variables A, B, and C.

Since the parameters in eq.3 are probabilities, they are subject to certain constraints. They need to be nonnegative, and sum to unity within a given latent class. The latter can be expressed by eq.4 - eq.10.

$$\sum_{t=1}^{T} \Pi_t^X = 1 \tag{4}$$

$$\sum_{i=1}^{I} \Pi_{it}^{\bar{A}X} = 1 \tag{5}$$

$$\sum_{j=1}^{J} \Pi_{jt}^{\bar{B}X} = 1 \tag{6}$$

$$\sum_{k=1}^{K} \Pi_{kt}^{\bar{C}X} = 1 \tag{7}$$

and

$$\sum_{t=1}^{T} \Pi_t^X \Pi_{it}^{\bar{A}X} = \Pi_i^A \tag{8}$$

$$\sum_{t=1}^{T} \Pi_t^X \Pi_{jt}^{\bar{B}X} = \Pi_j^B \tag{9}$$

$$\sum_{t=1}^{T} \Pi_t^X \Pi_{kt}^{\bar{C}X} = \Pi_k^C \tag{10}$$

Applying the definition of conditional probabilities, we can state

$$\Pi_{ijkt}^{ABC\bar{X}} = \Pi_{ijkt}^{ABCX} / \Pi_{ijk} \tag{11}$$

where $\Pi_{ijkt}^{ABC\bar{X}}$ indicates the conditional probability that an individual will be in latent class t, given that he is in the (i, j, k) cell with respect to the joint observable variable (A, B, C).

Thus, the parameter Π_t^X can be rewritten as

$$\Pi_t^X = \sum_{i,j,k} \Pi_{ijk} \Pi_{ijkt}^{ABC\bar{X}} \tag{12}$$

and the conditional probabilities as

$$\Pi_{it}^{\bar{A}X} = (\sum_{j,k} \Pi_{ijk} \Pi_{ijkt}^{ABC\bar{X}}) \Pi_t^X \tag{13}$$

$$\Pi_{jt}^{\bar{B}X} = (\sum_{i,k} \Pi_{ijk} \Pi_{ijkt}^{ABC\bar{X}}) \Pi_t^X \tag{14}$$

$$\Pi_{kt}^{\bar{C}X} = (\sum_{i,j} \Pi_{ijk} \Pi_{ijkt}^{ABC\bar{X}}) \Pi_t^X \tag{15}$$

3.6.3 Identification

The problem of identification of a model refers to whether a determinate solution can be obtained for every parameter. Not all latent class models are identifiable. The number of parameters to be estimated is called the basic set and equals

$$[I + J + K - (M - 1)]T - 1 \tag{16}$$

where M is the number of observable variables. A required condition for identification is that the number of parameters to be estimated in a given latent class model needs to be smaller than the number of the cells, which can be expressed

$$IJK - 1 > [I + J + K - (M - 1)]T - 1 \tag{17}$$

where the latent class model is not identified, additional restrictions may be placed which may make the model identifiable. The computer program MLLSA can accept a wide array of restrictions. The program also has provisions to check for identifiability.

3.6.4 Goodness-of-Fit

Once the maximum likelihood estimates have been found, several statistics and indices of fit can be used to examine the fit of the model. Two different test statistics, the Pearson X^2 and the log-likelihood ration (L^2), are appropriate.

$$X^2 = N \sum (P_{ijk} - \hat{\Pi}_{ijk})^2 / \hat{\Pi}_{ijk} \tag{18}$$

$$L^2 = 2\ n \sum P_{ijk} \ln(P_{ijk} / \hat{\Pi}_{ijk}) \tag{19}$$

Both statistics are based on large sample theory. For very large samples, L^2 is preferred (Haberman 1978), but it is unclear what to use for very small samples. It is advisable to use both.

The following additional indices can also be used

1. $F_i = L^2(M_i)/d.f.(M_i)$ is a measure analogous to the F-statistic used in regression analysis (Haberman 1978).

2. $R^2 = [L^2(M_0) - L^2(M_1)/L^2(M_0)$ reflects the percentage improvement of a model over the restricted model (Mo) of independence. R^2 will be in the range of zero to one (Goodman 1971, 1972a; Zahn and Fein 1979).

3. $R_w^2 = (F_0 - F_1)/F_0$ measure reflects not only goodness-of-fit but also parsimony (Bonnett and Bentler 1983).

4. $\Delta = \sum \hat{\Pi}_{ijkt}^{\bar{A}\bar{B}\bar{C}X} P_{ijk}$ shows the accuracy of classification of the sample into the classes of X (Clogg 1977).

5. $\lambda = (E_1 - E_2)E_1$ is a measure of the proportional reduction in error of the fitted model (Goodman and Kruskal 1954).

The incremental fit indices R^2 and R_w^2 are very appropriate for exploratory work. They represent improvement over the completely restricted latent class model of complete independence. The R^2 and R_w^2 estimates are more appropriate for examining the quality of the latent classes (Dillon and Goldstein 1984).

Appendix C gives a hypothetical example of a three-class model applied to the data of appendix B. This table indicates that the unconditional probability that an individual will be a member of the latent class 1 is 0.35, while the probabilities for latent classes 2 and 3 are 0.45 and 0.20, respectively. The conditional probability that an individual will be observed on the high level of the manifest variable income given that the individual is in class 3 is 0.70. The probability that the individual will be observed on the high income category for class 1 is 0.30. The corresponding probabilities for the same levels in class 2 and class 3 are 0.25, 0.75 and 0.55, 0.45 respectively. The individual in class 1 is more likely to have high income, a high school education, a managerial occupation, to be younger than thirty-five years old, and to attend professional games. An individual in class 2 is more likely to have a high school education, a clerical occupation, to be older than thirty-five years old, not to belong to a country/health club and not to attend professional games. Based on these conditional probabilities, all individuals are assigned into the three profiles (classes). An individual with high income, college education, managerial occupation, and who is younger than thirty-five and attends professional games will be assigned to class 1. Similarly, a respondent with a low income, high school education, clerical occupation, and who is older than thirty-five, does not belong to a country/health club, and does not attend professional games will be assigned to class 2. The assignment of the individuals into three classes can be viewed as the creation of a new variable at three level.

VARIABLE A	VARIABLE B	VARIABLE C	FREQUENCIES
1	1	1	f_{111}
1	1	2	f_{112}
1	2	1	f_{121}
1	2	2	f_{122}
2	1	1	f_{211}
2	1	2	f_{212}
2	2	1	f_{221}
2	2	2	f_{222}

Table 4: Three-Way Contingency table

3.7 LOGIT BASED ANALYSIS

Goodman's approach to logit based analysis is described in this section to demonstrate how the four hypotheses are tested. To utilize logit models, a three-way table is used. In this case the variable user is included in order to create the cell probabilities. In the final analysis, the user three-way table (profiles by products by situations) is analyzed.

A 2X2X2 table (table 4) is used to demonstrate logit based analysis. Variables A, B, and C have two levels. Each of table 4's eight cells can be designated (i,j,k), where i=1 or 2, j=1 or 2, and k=1 or 2.

Let f_{ijk} denote the observed frequency in a cell (i,j,k) of table 4. Note that each row of table 6 can be described by the triplet (i,j,k). In this study, it corresponds to the three-way table (profiles by products by situations) which is used to test the four hypotheses. Thus, we can write the cell probabilities as

$$P_{ijk} = P(f_1 = i, f_2 = j, f_3 = k) + P... = 1.0 \tag{20}$$

The odds that an individual will be a user in a cell (i,j,k) is ω_{jjk}.

Let F_{ijk} denote the expected frequency in a cell (i,j,k) under some prespecified model. Similarly, Ω_{ijk}will denote the odds based on the expected frequencies. Goodman's approach expresses the Ω_{ijk} in terms of a set of parameters that describe the "main effects" of variables A, B, C, and the "interaction effects" among A, B, and C variables in a way that is somewhat similar to the corresponding effects in the usual analysis of variance.

The multiplicative odds saturated model for the three-way table will be:

$$\Omega_{ijk} = \gamma\gamma_i^A\gamma_j^B\gamma_k^C\gamma_{ij}^{AB}\gamma_{ik}^{AC}\gamma_{jk}^{BC}\gamma_{ijk}^{ABC} \tag{21}$$

where

$$\gamma_1^A = 1/\gamma_2^A \tag{22}$$

$$\gamma_1^B = 1/\gamma_2^B \tag{23}$$

$$\gamma_1^C = 1/\gamma_2^C \tag{24}$$

$$\gamma_{11}^{AB} = \gamma_{22}^{AB} = 1/\gamma_{12}^{AB} = 1/\gamma_{21}^{AB} \tag{25}$$

$$\gamma_{11}^{AC} = \gamma_{22}^{AC} = 1/\gamma_{12}^{AC} = 1/\gamma_{21}^{AC} \tag{26}$$

$$\gamma_{11}^{BC} = \gamma_{22}^{BC} = 1/\gamma_{12}^{BC} = 1/\gamma_{21}^{BC} \tag{27}$$

$$\gamma_{111}^{ABC} = \gamma_{221}^{ABC} = \gamma_{122}^{ABC} = \gamma_{212}^{ABC} = 1/\gamma_{222}^{ABC} = 1/\gamma_{112}^{ABC} = \gamma_{211}^{ABC} = 1/\gamma_{121}^{ABC} \tag{28}$$

Parameter γ is the main effect of the general mean on Ω_{ijk}, and γ_i^A, γ_j^B, and γ_k^C are the main effects of variables A, B, and C on Ω_{ijk}, accordingly. Parameter γ_{ij}^{AB} describes the interaction of variables A and B on Ω_{ijk}. Similarly, γ_{ik}^{AC} is the interaction effect of variables A and C on Ω_{ijk}. γ_{jk}^{BC} is the interaction effect of variables B and C on Ω_{ijk}. γ_{ijk}^{ABC} is the three-way interaction effect of variables A, B, and C on Ω_{ijk}.

The γ parameters in eq.21 can be estimated as follows:

$$\gamma = \prod_{i=1}^{2}\prod_{j=1}^{2}\prod_{k=1}^{2} \omega_{ijk}\ 1/8 \tag{29}$$

$$\gamma_1^A = \prod_{j=1}^{2}\prod_{k=1}^{2} \omega_{ijk}/\omega_{2jk}\ 1/8 \tag{30}$$

$$\gamma_{11}^{AB} = \prod_{k=1}^{2} \omega_{11k}\omega_{22k}/\omega_{12k}\omega_{21k}\ 1/8 \tag{31}$$

$$\gamma_{111}^{ABC} = \omega_{111}\omega_{221}\omega_{212}\omega_{122}/\omega_{112}\omega_{121}\omega_{211}\omega_{222}\ 1/8 \tag{32}$$

If in the saturated model we set a particular effect equal to one, we have an unsaturated model. In this case in the estimation procedure we substitute the observed odds (ω_{ijk}) by the expected odds (Ω_{ijk}) in the formulas eq.29 - eq.32. The saturated model fits the data perfectly since we use the observed odds (Ω_{ijk}). Let define Φ_{ijk} as the natural logarithm of Ω_{ijk}

$$\Phi_{ijk} = \log \Omega_{ijk} \tag{33}$$

If we take the natural logarithm of eq.21, we have

$$\Phi_{ijk} = (\log\gamma)+(\log\gamma_i^A)+(\log\gamma_j^B)+(\log\gamma_k^C)+(\log\gamma_{ij}^{AB})+(\log\gamma_{ik}^{AC})+(\log\gamma_{jk}^{BC})+(\log\gamma_{ijk}^{ABC}) \tag{34}$$

If we define

$$\log\gamma = \beta \tag{35}$$

$$\log\gamma_i^A = \beta_i^A \tag{36}$$

$$\log\gamma_j^B = \beta_j^B \tag{37}$$

$$\log\gamma_k^C = \beta_k^C \tag{38}$$

$$\log\gamma_{ij}^{AB} = \beta_{ij}^{AB} \tag{39}$$

$$\log \gamma_{ik}^{AC} = \beta_{ik}^{AC} \tag{40}$$

$$\log \gamma_{jk}^{BC} = \beta_{jk}^{BC} \tag{41}$$

and

$$\log \gamma_{ijk}^{ABC} = \beta_{ijk}^{ABC} \tag{42}$$

we can write eq.34 as follows:

$$\Phi_{ijk} = \beta + \beta_i^A + \beta_j^B + \beta_k^C + \beta_{ij}^{AB} + \beta_{ik}^{AC} + \beta_{jk}^{BC} + \beta_{ijk}^{ABC} \tag{43}$$

where

$$\beta_1^A = -\beta_2^A \tag{44}$$

$$\beta_1^B = -\beta_2^B \tag{45}$$

$$\beta_1^C = -\beta_2^C \tag{46}$$

$$\beta_{11}^{AB} = \beta_{22}^{AB} = -\beta_{12}^{AB} = -\beta_{21}^{AB} \tag{47}$$

similarly, for β_{ik}^{AC} and β_{jk}^{BC}

$$\beta_{111}^{ABC} = \beta_{221}^{ABC} = \beta_{212}^{ABC} = \beta_{122}^{ABC} = \beta_{112}^{ABC} = -\beta_{121}^{ABC} = -\beta_{211}^{ABC} = -\beta_{222}^{ABC} \tag{48}$$

The parameters in eq.43 can be estimated from eq.29, eq.30, eq.31, and eq.32 if we substitute the observed odds (ω_{ijk}) with expected odds (Ω_{ijk}) and take their natural logarithm. Thus, we have

$$\beta = [\sum_{i=1}^{2}\sum_{j=1}^{2}\sum_{k=1}^{2} \Phi_{ijk}]\ 1/8 \tag{49}$$

$$\beta_1^A = \sum_{j=1}^{2}\sum_{k=1}^{2}(\Phi_{1jk} - \Phi_{2jk})\ 1/8 \tag{50}$$

$$\beta_{11}^{AB} = \sum_{k=1}^{2}(\Phi_{11k} + \Phi_{22k} - \Phi_{12k} - \Phi_{21k})\ 1/8 \tag{51}$$

$$\beta_{111}^{ABC} = \Phi_{111} + \Phi_{221} + \Phi_{212} + \Phi_{122} - \Phi_{112} - \Phi_{121} - \Phi_{211} - \Phi_{222}\ 1/8 \tag{52}$$

Equations 49 - 52 are used to estimate the frequencies under any unsaturated model. For the saturated model the actual frequencies are used. The parameter γ in eq.21 takes values greater than zero. A value of one means that there is not a significant effect of the parameter on the odds ratio. A value greater than one means a positive effect, while a value of less than one indicates a negative effect.

The natural logarithm of $\gamma(\beta)$ will be zero when γ equals one. In other words, if we hypothesized no relationship (effect) between an independent and the dependent variables, the γ parameter will be equal to one and the corresponding parameter β will be zero. A positive β value indicates a positive effect while a negative value indicates a negative impact.

The multiplicative odds model eq.21 and the log-odds model are equivalent (Goodman 1972). The usual logit model is defined as being $\Phi_{ijk}/2$ (Fisher and Yates 1963). So the logit model multiplied by 2 can be expressed as the sum of parameters $\beta, \beta_i^A, \beta_j^B, \beta_k^C, \beta_{ij}^{AB}, \beta_{ik}^{AC}, \beta_{jk}^{BC}$, and β_{ijk}^{ABC}. To test whether a particular β parameter is nil we obtain the standardized value of β's by dividing each estimated β parameter by its estimated standard deviation Sβ. If a particular β parameter is nil, the corresponding effect (main or interaction) is not significant.

In the present study we need to test for the saturated model in order to test the four hypotheses. The four hypotheses indicate that the saturated model is the only one to fit the data well.

CHAPTER IV

ANALYSIS

4.1 INTRODUCTION

This chapter describes the analysis performed in this study. First, the search for profiles is presented. The creation of the three-way contingency table to test the hypotheses is described. A presentation of the results of the multiplicative logit model follows. Finally, the analysis and the general findings of the study are discussed.

4.2 PROFILE CREATION

The analysis began with thirty-seven original demographic and lifestyle variables from the telephone interviews. With only one thousand responses to be spread throughout the thirty-seven dimensional table, some reduction of the original variables was necessary. Contingency tables were created using six variables at a time to determine the variables with highest interaction. All variables were recoded to only two levels.

The tables were analyzed using a BMDP-4F program, appropriate for the analysis of categorical tables. The thirty seven variables were reduced to the following thirteen, all at two levels.

Var 1) Go to professional games.

Var 2) Go to opera/ballet.

Var 3) Belong to an athletic/health club.

Var 4) How much TV they watch.

Var 5) How many magazines do they subscribe to.

Var 6) How many books do they read per month.

Var 7) Employment.

Var 8) Education.

Var 9) Occupation.

Var 10) Spouse Employment.

Var 11) Age.

Var 12) Income.

Var 13) Sex.

Variable one was created by combining four variables-how often they went to professional basketball; how often they went to professional hockey; how often they went to professional soccer; and how often they went to professional golf. It was coded at two levels-they did not attended any professional games; they attended at least one professional game. Professional football and baseball were eliminated because everybody was attending them.

Variable two was constructed by combining two variables-how often they went to the opera; how often they went to ballet. It was coded at two levels- they did not attend ballet or opera; they went either to opera or ballet.

Variable three was coded at two levels; they did not belong to any athletic or health club; two they belonged either to an health or athletic club. Variable four was created by combining two variables-how many hours they watched TV on

weekdays; how much TV they watched on weekends. It was dichotomous-in level one were those who watched TV at most two hours either on a weekend or weekday; in level two were those who watched TV more than two hours per day either on a weekend or on a weekday. Variable five, how many magazines they received per month, was also dichotomous. At level one were those who purchased less than four magazines; at level two were those who purchased at least four magazines.

The above variables were again cross-classified six-at-a-time to create six-way contigency tables. These tables were analyzed with a BMDP-4F program to determine those with the highest interaction for the final analysis of the profile creation. Finally, based again on their interaction, nineteen tables were selected for the analysis (see appendix D).

These tables were analyzed utilizing the MLLSA program to uncover distinct profiles. One, two, three, four, five and six-class unrestricted latent class models were applied to the tables. Only the six-class models fit the data satisfactorily. The table, Var4 by Var7 by Var9 by Var10 by Var11 by Var12 (Table 5), produced the best profile. The results are shown in Table 6. The fit of the six-class model is good with 29, 4 chi-squares and 23 degrees of freedom, significant at the 0.05 level. The MLLSA program assigns the individuals to the particular latent class. The six-class model allocates correctly eighty-six per-cent of the respondents. The assignment of the individuals to the latent classes allows us to convert the original 2X2X2X2X2X2 table into a new variable(Profiles) at six levels. Table 7 exhibits the characteristics of the individuals in the six profiles. In profile one respondents work full-time, are college graduates, belong either to a health or athletic club, are younger than thirty-five, have income lower than $35,000 and have spouses that work part-time. Profile two comprises individuals who do not belong to either an

Employ	Belong to club	Educat	Spouse Employ	Age	Income	
					Low	High
Full	No	High	Full	<35	30.	17.
Full	No	High	Full	>35	4.	4.
Full	No	High	Part	<35	29.	20.
Full	No	High	Part	>35	14.	5.
Full	No	Clg	Full	<35	39.	4.
Full	No	Clg	Full	>35	9.	2.
Full	No	Clg	Part	<35	75.	14.
Full	No	Clg	Part	>35	62.	14.
Full	Yes	High	Full	<35	15.	27.
Full	Yes	High	Full	>35	3.	8.
Full	Yes	High	Part	<35	24.	12.
Full	Yes	High	Part	>35	6.	5.
Full	Yes	Clg	Full	<35	20.	5.
Full	Yes	Clg	Full	>35	3.	1.
Full	Yes	Clg	Part	<35	44.	6.
Full	Yes	Clg	Part	>35	16.	3.
Part	No	High	Full	<35	5.	6.
Part	No	High	Full	>35	4.	4.
Part	No	High	Part	<35	34.	7.
Part	No	High	Part	>35	29.	3.
Part	No	Clg	Full	<35	3.	0.
Part	No	Clg	Full	>35	2.	0.
Part	No	Clg	Part	<35	20.	1.
Part	No	Clg	Part	>35	12.	2.
Part	Yes	High	Full	<35	14.	9.
Part	Yes	High	Full	>35	10.	5.
Part	Yes	High	Part	<35	33.	17.
Part	Yes	High	Part	>35	22.	21.
Part	Yes	Clg	Full	<35	9.	2.
Part	Yes	Clg	Full	>35	4.	1.
Part	Yes	Clg	Part	<35	56.	3.
Part	Yes	Clg	Part	>35	37.	1.

Table 5: Six Variable Contingency Table Used to Create the Profiles

VARIABLES	VARIABLE LEVEL	LATENT CLASS					
		1	2	3	4	5	6
EMPLOYMENT	FULL	.795	.962	.627	.889	.072	.722
	PART	.205	.038	.373	.112	.928	.278
BELONG TO CLUB	NO	.269	.626	.915	.935	.696	.554
	YES	.732	.374	.085	.065	.304	.446
EDUCATION	HIGH	.096	.121	.506	.390	.780	.217
	COLLEGE	.904	.879	.494	.611	.220	.783
SPOUSE EMPLOY	FULL	.127	.000	.999	.043	.870	.999
	PART	.873	1.000	.001	.957	.130	.001
AGE	<35	.880	.224	.645	.645	.182	.425
	>35	.200	.776	.355	.355	.818	.575
INCOME	<$35,000	.939	.160	1.000	.984	.706	.122
	>$35,000	.613	.840	.000	.016	.294	.878

Table 6: Profiles Created Analysing table 5

VARIABLE	CLASS 1	CLASS 2	CLASS 3	CLASS 4	CLASS 5	CLASS 6
Employment	Full	Full	Full	Full	Part	Full
Belong to club	Yes	No	No	No	No	No
Education	College	College	High	College	High	College
Spouse Empl.	Part	Part	Full	Part	Full	Full
Age	35<	35+	35<	35<	35+	35+
Income	35K<	35K+	35K<	35K<	35K<	35K+
Size	16%	18%	14%	19%	7%	26%

Table 7: Characteristics of Individuals Assigned to the Six Latent Classes

athletic or health club, are employed full-time, have a college education, have an income higher than $35,000, are older than thirty-five and have spouses who work part-time. In profile three respondents work full-time, are high school graduates, do not belong either to a health or athletic club, are younger than thirty-five, have income lower than $35,000 and have spouses that work full-time. Profile four has individuals who do not belong to either an athletic or health club, are employed full-time, have a college education, have an income lower than $35,000, are younger than thirty-five and have spouses who work part-time. In profile five individuals work part-time, are high school graduates, do not belong either to a health or athletic club, are older than thirty-five, have income lower than $35,000 and have spouses that work full-time. Profile two comprises individuals who do not belong to either an athletic or health club, are employed full-time, have a college education, have an income higher than $35,000, are older than thirty-five and have spouses who work full-time. Sixteen per-cent of the respondents are assigned to class one, eighteen per-cent to class two, fourteen per-cent to class three, nineteen per-cent to class four, seven per-cent to class five, and twenty six per-cent to class six. Table 8 shows how individuals are assigned to the six latent classes(profiles).

4.3 THE FINAL THREE-WAY CONTINGENCY TABLE

The final contingency table comprised three variables–profiles, consumption situation, and product choice. The variable "profile" had six levels (class one to class six); the variable, "consumption situation", had six levels (the six consumption situations); and the variable "product" had two levels (wine, beer). Thus, the final contingency table for testing the four hypotheses had the dimensions 6X6X2. Table 9 presents this final table for analysis. The four hypotheses were tested by analyzing

Employ	Belong to club	Educat	Spouse Employ	Age	Income	Assign to Class
1	1	1	1	1	1	3
1	1	1	1	1	2	3
1	1	1	1	2	1	3
1	1	1	1	2	2	5
1	1	1	2	1	1	3
1	1	1	2	1	2	3
1	1	1	2	2	1	1
1	1	1	2	2	2	1
1	1	2	1	1	1	4
1	1	2	1	1	2	4
1	1	2	1	2	1	1
1	1	2	1	2	2	1
1	1	2	2	1	1	4
1	1	2	2	1	2	4
1	1	2	2	2	1	1
1	1	2	2	2	2	1
1	2	1	1	1	1	3
1	2	1	1	1	2	5
1	2	1	1	2	1	3
1	2	1	1	2	2	5
1	2	1	2	1	1	3
1	2	1	2	1	2	3
1	2	1	2	2	1	6
1	2	1	2	2	2	5
1	2	2	1	1	1	4
1	2	2	1	1	2	5
1	2	2	1	2	1	4
1	2	2	1	2	2	5
1	2	2	2	1	1	4
1	2	2	2	1	2	4
1	2	2	2	2	1	1
1	2	2	2	2	2	1

Table 8: Classification of Individuals into Six Latent Classes Using MLLSA

Employ	Belong to club	Educat	Spouse Employ	Age	Income	Assign to Class
2	1	1	1	1	1	6
2	1	1	1	1	2	6
2	1	1	1	2	1	6
2	1	1	1	2	2	6
2	1	1	2	1	1	6
2	1	1	2	1	2	6
2	1	1	2	2	1	6
2	1	1	2	2	2	6
2	1	2	1	1	1	2
2	1	2	1	1	2	5
2	1	2	1	2	1	2
2	1	2	1	2	2	1
2	1	2	2	1	1	2
2	1	2	2	1	2	2
2	1	2	2	2	1	2
2	1	2	2	2	2	1
2	2	1	1	1	1	6
2	2	1	1	1	2	5
2	2	1	1	2	1	6
2	2	1	1	2	2	6
2	2	1	2	1	1	6
2	2	1	2	1	2	6
2	2	1	2	2	1	6
2	2	1	2	2	2	6
2	2	2	1	1	1	2
2	2	2	1	1	2	5
2	2	2	1	2	1	2
2	2	2	1	2	2	5
2	2	2	2	1	1	2
2	2	2	2	1	2	2
2	2	2	2	2	1	2
2	2	2	2	2	2	2

Table 8: Continuation

PROFILE	SIT 1		SIT 2		SIT 3		SIT 4		SIT 5		SIT 6	
	B	W	B	W	B	W	B	W	B	W	B	W
1	15	94	35	87	51	32	38	51	120	14	91	0
2	2	42	5	31	18	18	17	23	41	6	36	0
3	14	27	21	30	40	19	40	10	61	3	42	1
4	19	100	37	97	67	55	75	53	134	14	108	5
5	6	66	4	54	14	37	7	40	51	9	43	0
6	3	37	5	41	12	19	15	17	31	10	20	6

Table 9: Final Three-Way Contingency Table Used to Test the Hypotheses

the final table. The table was analyzed by applying the multiplicative logit analysis. Hypothesis one, involving the three-way interaction, was tested by fitting the saturated model, which was the only one that fit the data satisfactorily. The results (Table 10) confirmed all hypotheses. The three-way interaction–profile by consumption situation by product interaction–was significant at the .01 level. Two two-way interactions–consumption situation by product, and profile by consumption situation–were significant at the .002 level. The product by profile interaction was significant at the .06 level. The results indicated that all hypotheses were confirmed. Thus, different people indeed prefer different products in different consumption situations.

Table 11 shows the gamma estimates for the two-way interactions between consumption situations and products chosen. Respondents heavily preferred wine over beer in situations one and two. The reverse was true for the situations five and six. In situations three and four wine and beer was almost equally consumed. These results were not surprising because situations were selected to be maximally different. However, only the interactions between situations one, two, and five, and products were significant. The other interactions were not significant.

EFFECT	D.F.	χ^2	PROB
R	1	14.54	.0001
S	5	31.67	.0000
P	5	581.57	.0000
RS	5	1094.84	.0000
RP	5	110.09	.0000
SP	25	36.85	.0596
RSP	25	50.41	.0019

Table 10: Test Results

SITUATION	PRODUCT	
	BEER	WINE
ONE	.323	3.097
TWO	.427	2.344
THREE	.884	1.131
FOUR	.859	1.165
FIVE	2.483	.403
SIX	3.850	.260

Table 11: Product by Situation γ-Estimates

PROFILE	PRODUCT	
	BEER	WINE
CLASS 1	1.135	.881
CLASS 2	.998	1.002
CLASS 3	1,736	.576
CLASS 4	1.165	.858
CLASS 5	.625	1.601
CLASS 6	.698	1.433

Table 12: Profile by Product γ-Estimates

PROFILE	SITUATIONS					
	ONE	TWO	THREE	FOUR	FIVE	SIX
CLASS1	1.090	1.297	.851	.936	1.019	.872
CLASS2	.862	.948	1.227	1.357	1.217	.604
CLASS3	1.248	1.304	1.284	.975	.660	.743
CLASS4	1.005	1.118	1.015	1.071	.855	.956
CLASS5	1.038	.621	.866	.831	1.222	1.764
CLASS6	.817	.899	.848	.907	1.167	1.516

Table 13: Profile by Situation γ-Estimates

The gamma estimates for the interactions between profiles and products are shown in table 12. As the table indicates individuals who were assigned to class five and class six preferred wine over beer in these situations, while individuals assigned to class three preferred beer over wine. The other interactions were not statistically significant.

Table 13 shows the gamma estimates of the two-way interaction between profiles and situations. The interactions between class five and situation six, and class five and situation two were significant. Individuals in profile five were more frequently in situation six and less frequently in situation two.

Table 14 exhibits the gamma estimates of the three-way interactions among profiles, consumption situations, and products chosen. Only two interactions, class two-situation one-product, class five-situation one-product, were significant. Those with profile two preferred wine over beer, while those with profile five preferred beer in situation one.

Overall, all, two-way and three-way interaction were significant supporting the four hypotheses. Individuals with different profiles preferred different alcoholic products in various consumption situations.

PROFILE	SITUATION	PRODUCT	
		BEER	WINE
CLASS 1	ONE	.965	1.036
	TWO	1.159	.862
	THREE	1.112	.899
	FOUR	.768	1.301
	FIVE	.955	1.048
	SIX	1.096	.913
CLASS 2	ONE	.599	1.668
	TWO	.835	1.198
	THREE	1.000	1.000
	FOUR	.849	1.178
	FIVE	1.021	.979
	SIX	2.305	.434
CLASS 3	ONE	1.137	.879
	TWO	1.000	1.000
	THREE	.835	1.198
	FOUR	1.124	.890
	FIVE	1.091	.917
	SIX	.858	1.165
CLASS 4	ONE	1.026	.975
	TWO	1.100	.909
	THREE	.948	1.055
	FOUR	1.038	.963
	FIVE	.982	1.018
	SIX	.917	1.090
CLASS 5	ONE	1.324	.755
	TWO	.904	1.106
	THREE	1.000	1.000
	FOUR	1.000	1.000
	FIVE	1.000	1.000
	SIX	.835	1.197
CLASS 6	ONE	1.119	.893
	TWO	1.039	.963
	THREE	1.136	.880
	FOUR	1.314	.761
	FIVE	.957	1.045
	SIX	.602	1.662

Table 14: Profile by Situation by Product γ-Estimates

CHAPTER V

CONCLUSIONS

The main objective of this study was to examine the interaction effects of consumption situations, consumers' characteristics, and alternative products on consumer preference. A review of the relevant literature indicated that all two-way interactions, namely, consumption situation by consumers' characteristics, consumers' characteristics by product, and product by consumption situation, have been found to be significant. On the other hand, the three-way interaction among products, consumption situation, and consumers' characteristics are not significant. The consensus was that product choice was determined by consumers' consumption situation.

In investigating the three-way interaction, the variables, products, personal characteristics, and consumption situation, were analyzed.

5.1 CONSUMPTION SITUATION

The following six consumption situations were included: dinner at home with friends, parties outside home, night club or disco, picnic or barbecue, sporting events, and non-business dinner at a restaurant.

5.2 PRODUCTS

Consumer drinking of either wine or beer in any of the six consumption situations was analyzed to determine the significance of the interactions. A small number of consumers who drank both beer and wine in a particular consumption situation were eliminated.

5.3 PERSONAL CHARACTERISTICS

Six profiles (table 7) were discovered that correspond to different levels of the personal characteristics. Profile one included respondents who worked full-time, were college graduates, belonged either to a health or athletic club, were younger than thirty-five, had income lower than $35,000 and whose spouses worked part-time. Profile two had individuals who did not belong to either an athletic or health club, were full-time employees with a college education, had income higher than $35,000, were older than thirty-five, and whose spouses worked part-time.

5.4 SOME ISSUES OF CONCERN

The present study addresses the following three issues of concern: selection of the consumption situation, consumers in situations, and product selection.

5.4.1 Selection of the Consumption Situation

Six consumption situations were selected for the analysis. These were selected to be maximally different. In two consumption situations (dinner at home with friends, and non-business dinner at a restaurant) wine was heavily consumed. In

sporting events and picnics or barbecues, beer was mostly preferred. Finally, in parties outside home, and in night clubs or discos, beer and wine were almost equally selected.

The exclusion of the other eleven consumption situations influences the generality of the results. Extreme care is required in applying the specific outcomes and conclusions of this study to all consumption situations. The results indicated the significance of the three-way interaction among consumers' characteristics, consumption situations and products. The inclusion of more consumption situations may create different homogeneous groups preferring wine or beer in a different subgroup of consumption situations. In such cases, the specific outcome of this study will have limited applicability and managerial usefulness.

5.4.2 Consumers in Situations

Another issue of concern is the presence of the consumers in a particular consumption situation. In the present research respondents were allowed to be in more than one consumption situation. A respondent could be in one or up to six consumption situations. From a strictly statistical perspective this constitutes a serious problem. However, the nature of the problem does not allow participation of only those individuals who are present in only one consumption situation. Therefore, from a statistical point of view this is a problem but at the same time is the only way to investigate interaction effects of the variables. Thus, it is not a statistical problem, but is attributable to the situation under investigation.

5.4.3 Product Selection

The choice of the alcoholic products, beer and wine, was arbitrary. Due to the small number of respondents and the large number of consumption situations and profiles it was necessary to limit the product choice to only two. Inclusion of other products would have made the cell size of the final table for analysis smaller with possible effects on the outcome of the analysis.

The generalizability of the results of this study is limited to the consumption situations, products, and consumers with characteristics similar to the those included in this study. Therefore, these results may not be applicable to all consumers and useful for all consumption situations and products.

5.5 USEFULNESS OF THE STUDY

The present study clearly demonstrates the significance of the three-way interaction–product by consumption situation by consumers' characteristics-in addition to the three two-way interactions–consumers' characteristics by product, consumers' characteristics by consumption situation, consumption situation by products. This means that it is not the particular consumption situation but the consumer within the situation that dictates product choice. The consumption situation does not affect all individuals the same way. People with different profiles or personal characteristics, are influenced differently being in a different consumption situation. Product choice is determined by the consumers' interpretation and evaluation in the particular consumption situation. This interpretation and evaluation is also affected by consumers' demographic and life-style characteristics.

To predict consumer behavior in a particular consumption situation/occasion,

marketers need to know, not only the consumption situation, but also the consumers' personal characteristics.

The outcome of this study suggests to the marketing manager how consumption situations can be used in market segmentation, target market selection, positioning and advertising.

5.6 MANAGERIAL IMPLICATIONS

The importance of the consumption situation in consumer behavior has been emphasized. However, the dominant view was that the consumption situation was the main determinant of consumer choice. Accordingly, consumption situation has been proposed as a useful basis for market segmentation. The present study clearly indicates that it is the consumer within the consumption situation that determines product selection. The impact of these findings on market segmentation, target market selection, positioning and advertising is further analyzed in the following sections.

5.6.1 Market Segmentation

The great influence of the consumption situation on consumer behavior suggests that the consumption situation can be used as a basis for segmenting the market. This approach has been widely suggested by many researchers.

The outcome of this study indicates that it is the consumer within the situation that determines product choice. This means that the consumption situation along with personal characteristics needs to be used as a basis for segmentation. It suggests that consumers' characteristics should not be ignored in the way that

marketing managers, by utilizing only consumption situations, tend to segment the markets.

Using this approach, homogeneous groups–consumers with similar profiles who behave homogeneously and make the same product choice–can be identified. In today's marketplace where companies offer more than one brand in the same product category, this is very important. Different brands can be targeted to different profiles for a variety of consumption situations. Brand A can be targeted to consumers with profile one who drink wine in situations one and two. Brand B can be targeted to consumers with profile two who drink beer in consumption situations three and four. The use of the combinations of consumption situations and profiles, and consumers' characteristics as bases for segmenting markets will allow marketing managers to select different and distinct target markets for their brands. This will help minimize product cannibalization and contribute to greater total performance.

This approach will help marketers uncover profitable and viable segments which, under a different segmentation strategy, may have been considered small and unprofitable. The target market does not necessarily have to be the largest segment of the market. Some segments may not be big in size but they may be important and profitable either for small firms looking for a market niche, or for big companies with multiple entries in the product category.

5.6.2 Positioning/Advertising

Consumption situations can be used in formulating positioning strategies in conjunction with consumers' personal characteristics. Positioning a particular brand for a group of consumption situations requires the projection of the target market profiles in the context of the consumption situations. For example, to posi-

tion brand X (wine) for the consumption situations with dinner, the corresponding target profiles should be portrayed in the advertisement.

Knowing the personal characteristics of the target market in consumption situation will enable the marketing manager to reach the target segments more effectively by determining where to advertise. When used in positioning/advertising strategy, the consumption situation will influence the theme, context and the setting of the advertisement and thus contribute to a more effective strategy.

5.7 FUTURE RESEARCH RECOMMENDATIONS AND CONCLUSIONS

This study indicates that consumption situation along with personal characteristics should be used as a basis for market segmentation. This will influence the target market selection and the positioning/advertising strategy as well. However, since the present study is exploratory, further research is needed for marketing managers to have better and clearer results for managerial applications. To begin with, the number of consumption situations needs to be expanded. This will enable marketing managers to have a better idea of the market under consideration.

Once more consumption situations are included, they need to be gathered into homogeneous groups. The inclusion of more consumption situations will require new ways to group them into homogeneous segments to determine segments under investigation. Furthermore, the sample size also needs to be increased to allow for inclusion of more personal characteristics for more distinct segments.

The number of products under consideration needs to be increased and consumers should be forced to have only one choice per consumption situation. The latter is necessary to eliminate cells with small numbers or respondents.

The present study has examined and established the significance of the interaction among consumers' personal characteristics, products, and consumption situation. It demonstrated that it is not the consumption situation, but the consumer within the consumption situation, that determines product choice. This suggests that the consumption situation should be used along with consumers' personal characteristics as a basis for improved market segmentation. Further improved managerial implications are the resulting influence on target market selection and potential improvements in positioning/advertising strategy formulation.

APPENDIX A

QUESTIONNAIRE USED TO COLLECT THE DATA

TIME STARTED: _____

ALCOHOLIC BEVERAGE STUDY

MARKET: _____/ _____-9,10

TELEPHONE: (___) _____

RESPONDENT: (COMPLETE INTERVIEW)
1 MALE 21-34 -11
2 MALE 35-54
3 FEMALE 21-34
4 FEMALE 35-54

Hello, this is _____ from Total Research Corporation in Princeton, New Jersey. We're conducting a nationwide study on people's preferences for various beverages. This is not a sales call and all responses will be completely confidential.

(IF SEX QUOTA FILLED, ASK TO SPEAK TO SOMEONE OF OPPOSITE SEX. IF NO ONE OF OPPOSITE SEX IN HOUSEHOLD, CIRCLE NEXT NUMBER IN BOX BELOW AND RE-USE SCREENER.

I need to ask a few questions for statistical purposes to make sure you qualify.

1. Are you between 21 and 54 years of age?
   1 YES
   2 NO → (CIRCLE NEXT NUMBER IN BOX BELOW, ERASE AND RE-USE SCREENER. ASK TO SPEAK TO SOMEONE 21-54 YEARS OLD.)

2. Are you 21-34 or 35-54 years old?
   1 21-34
   2 35-54
   (IF QUOTA FILLED, CIRCLE NEXT NUMBER IN BOX BELOW, ERASE AND RE-USE SCREENER. ASK TO SPEAK TO SOMEONE (21-34/35-54).

AGE 21-34

3. In an average week, do you usually have two or more drinks of . . . (READ EACH)
   1 Juice, such as apple or orange
   2 Soft drinks
   3 Alcoholic beverages such as wine, beer, or distilled spirits

(IF ALCOHOLIC BEVERAGES NOT MENTIONED, CIRCLE NEXT NUMBER IN BOX BELOW, ERASE AND RE-USE SCREENER. ASK TO SPEAK TO SOMEONE ELSE.)

4. Is your yearly household income, before taxes, $18,000 or more?
   1 YES → (GO TO Q.7 ON BLUE PAGE)
   2 NO → (TERMINATE, CIRCLE NEXT NUMBER IN BOX BELOW, ERASE AND RE-USE SCREENER.)

Age 35-54

5. In an average week, do you usually have two or more drinks of . . . (READ EACH)
   1 Juice, such as apple or orange
   2 Soft drinks
   3 Alcoholic beverages such as wine, beer, or distilled spirits

(IF ALCOHOLIC BEVERAGES NOT MENTIONED, CIRCLE NEXT NUMBER IN BOX BELOW, ERASE AND RE-USE SCREENER. ASK TO SPEAK TO SOMEONE ELSE.)

6. Is your yearly household income, before taxes, $25,000 or more?
   1 YES → (GO TO Q.7 ON BLUE PAGE)
   2 NO → (CIRCLE NEXT NUMBER IN BOX BELOW, ERASE AND RE-USE SCREENER. ASK TO SPEAK TO SOMEONE 21-34. IF NO ONE 21-34 IN HOUSEHOLD, TERMINATE.)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | -12

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | -13

As I said earlier, we're conducting a study to find out what beverages people like to drink on a variety of different occasions. First, I'm going to read a list of different occasions on which people usually drink beverages of one kind or another and I would like to find out how often you are in that situation in an average month. Just tell me if you frequently, occasionally, rarely or never are in that situation in an average month.

7. In an average month, how often do you eat lunch at home?

Page					
03	1	Frequently	3	Rarely	-14
	2	Occasionally	4	Never	

8. How often in an average month do you attend business lunches?

Page					
04	1	Frequently	3	Rarely	-15
	2	Occasionally	4	Never	

9. How often do you eat lunch in a restaurant which serves alcoholic beverages?

Page					
05	1	Frequently	3	Rarely	-16
	2	Occasionally	4	Never	

10. ...go to a lounge or bar in the evening after work and before dinner?

Page					
06	1	Frequently	3	Rarely	-17
	2	Occasionally	4	Never	

11. ...go to a party in the evening after work and before dinner?

Page					
07	1	Frequently	3	Rarely	-18
	2	Occasionally	4	Never	

12. ...have some kind of a beverage at home in the evening after work and before dinner?

Page					
08	1	Frequently	3	Rarely	-19
	2	Occasionally	4	Never	

13. ...do you have dinner at home without guests?

Page					
09	1	Frequently	3	Rarely	-20
	2	Occasionally	4	Never	

14. ...do you have dinner at home with friends?

Page					
10	1	Frequently	3	Rarely	-21
	2	Occasionally	4	Never	

15. ... have business guests for dinner, either at home or out somewhere?

Page					
11	1	Frequently	3	Rarely	-22
	2	Occasionally	4	Never	

16. ... eat dinner in a restaurant which serves alcoholic beverages, not including business dinners?

Page					
12	1	Frequently	3	Rarely	-23
	2	Occasionally	4	Never	

17. ... have a beverage of some kind in the evening after dinner and before retiring at home without guests?

Page					
13	1	Frequently	3	Rarely	-24
	2	Occasionally	4	Never	

18. ... have friends in your home for a casual visit after dinner and before retiring?

Page					
14	1	Frequently	3	Rarely	-25
	2	Occasionally	4	Never	

19. Thinking over an average year, not just an average month, how often do you have a party in your home?

Page					
15	1	Frequently	3	Rarely	-26
	2	Occasionally	4	Never	

20. ... go to a party outside your home?

Page					
16	1	Frequently	3	Rarely	-27
	2	Occasionally	4	Never	

21. And how often do you go to a night club or disco, in an average year?

Page					
17	1	Frequently	3	Rarely	-28
	2	Occasionally	4	Never	

22. ... have a picnic or bar-be-cue at your home or go to one someplace else?

Page					
18	1	Frequently	3	Rarely	-29
	2	Occasionally	4	Never	

23. And finally, how often, in an average year, do you go to sporting events?

Page					
19	1	Frequently	3	Rarely	-30
	2	Occasionally	4	Never	

Now for each activity which you do frequently or occasionally, I'd like to find out what your favorite beverage is. When I say beverage, I mean any kind of beverage. That includes water milk, soda, coffee, juice, beer, wine, mixed drinks, distilled spirits,or whatever. Let's start with. . . (MENTION FIRST CIRCLED FREQUENTLY OR OCCASIONALLY ON FLAP AND GO TO PAGE INDICATED ON BLUE PAGE.)

(AFTER LAST SITUATION PAGE, GO TO PAGE 20.)

Telephone #: (_____) _____ (80-1

(-03-) -12,13

24. What liquids do you usually have to drink during or around lunch time when you eat at home? -14

NON-ALCOHOLIC -16

1 *JUICE ONLY
2 *WATER ONLY
3 COFFEE
4 TEA
5 MILK
6 SODA ONLY
7 NOTHING
8 OTHER (Specify) _____

____15

ALCOHOLIC

1 *WINE
2 *BEER
3 *WHISKEY, SCOTCH, CANADIAN, IRISH, BOURBON, RYE, SOUR MASH, CORN, OTHER WHISKEY
4 GIN
5 VODKA
6 RUM
7 BRANDY
8 *NAME OF DRINK (Specify) _____
9 OTHER (Specify) _____ ____17

(IF JUICE GIVEN ON Q.24, ASK:)

25. What kind of juice do you usually drink? -18
1 ORANGE
2 APPLE
3 TOMATO
4 OTHER (Specify) _____

(IF "BEER" IN Q.24, ASK:)

26. What brand of beer do you usually drink? _____ ____19 ____20

27. Is that a light or a regular beer? (CHECK APPROPRIATE)
( ) LIGHT
( ) REGULAR

(IF "WINE" IN Q.24, ASK:)

28. Do you usually drink red, white, or rosé? -21
1 RED
2 WHITE
3 ROSÉ
4 NO PREFERENCE/DEPENDS ON FOOD

29. And do you usually drink domestic or imported wine? -22
1 DOMESTIC
2 IMPORTED
3 NO PREFERENCE

(IF "WATER," IN Q.24, ASK:)

30. Is that tap water, bottled carbonated water, or bottled non-carbonated water? -23
1 TAP
2 BOTTLED CARBONATED
3 BOTTLED NON-CARBONATED

(IF NAME OF A DRINK GIVEN IN Q.24, ASK:)

31. What alcoholic beverage is in that drink? _____

(IF WHISKEY, SCOTCH, IRISH, RYE, CANADIAN, BOURBON, SOUR MASH, CORN MENTIONED IN Q.24 OR Q.31, ASK:)

32. What brand of ____ do you usually have? _____ ____24

33. Has what you drink during, or around lunch time when you eat at home, changed over the past three years? -25
1 YES
2 NO

(IF "YES," ON Q.33, ASK:)

34. What did you drink before? -26

NON-ALCOHOLIC -28

1 JUICE ONLY
2 WATER ONLY
3 COFFEE
4 TEA
5 MILK
6 SODA ONLY
7 NOTHING
8 OTHER (Specify) _____

____27

ALCOHOLIC

1 WINE
2 BEER
3 WHISKEY, SCOTCH, CANADIAN, IRISH, BOURBON, RYE, SOUR MASH, CORN, OTHER WHISKEY
4 GIN
5 VODKA
6 RUM
7 BRANDY
8 NAME OF DRINK (Specify) _____
9 OTHER (Specify) _____ ____29

35. Why did you change? _____ ____30

_____ ____31

(GO TO NEXT SITUATION CHECKED "FREQUENTLY" OR "OCCASIONALLY" ON BLUE PAGE.) (80-2)

(-04-) -12,13

24. What liquids do you usually have to drink during or around a business lunch? -14

NON-ALCOHOLIC		ALCOHOLIC	
1 *JUICE ONLY	-16	1 *WINE	
2 *WATER ONLY		2 *BEER	
3 COFFEE		3 *WHISKEY, SCOTCH, CANADIAN, IRISH, BOURBON, RYE, SOUR MASH, CORN, OTHER WHISKEY	
4 TEA		4 GIN	
5 MILK		5 VODKA	
6 SODA ONLY		6 RUM	
7 NOTHING		7 BRANDY	
8 OTHER (Specify)		8 *NAME OF DRINK (Specify)	
		9 OTHER (Specify)	

____15 _____ _____ ____17

(IF JUICE GIVEN ON Q.24, ASK:)

25. What kind of juice do you usually drink? -18
1 ORANGE
2 APPLE
3 TOMATO
4 OTHER (Specify) _____

(IF "BEER" IN Q.24, ASK:)

____19

26. What brand of beer do you usually drink? _____ ____20

27. Is that a light or a regular beer? (CHECK APPROPRIATE)
( ) LIGHT
( ) REGULAR

(IF "WINE" IN Q.24, ASK:)

28. Do you usually drink red, white, or rosé? -21
1 RED
2 WHITE
3 ROSÉ
4 NO PREFERENCE/DEPENDS ON FOOD

29. And do you usually drink domestic or imported wine? -22
1 DOMESTIC
2 IMPORTED
3 NO PREFERENCE

(IF "WATER," IN Q.24, ASK:)

30. Is that tap water, bottled carbonated water, or bottled non-carbonated water? -23
1 TAP
2 BOTTLED CARBONATED
3 BOTTLED NON-CARBONATED

(IF NAME OF A DRINK GIVEN IN Q.24, ASK:)

31. What alcoholic beverage is in that drink? _____

(IF WHISKEY, SCOTCH, IRISH, RYE, CANADIAN, BOURBON, SOUR MASH, CORN MENTIONED IN Q.24 OR Q.31, ASK:)

32. What brand of ____ do you usually have? _____ ____24

33. Has what you drink when you attend business lunches changed over the past three years? -25
1 YES
2 NO

(IF "YES," ON Q.33, ASK:)

NON-ALCOHOLIC		ALCOHOLIC	
34. What did you drink before? -26	-28	1 WINE	
1 JUICE ONLY		2 BEER	
2 WATER ONLY		3 WHISKEY, SCOTCH, CANADIAN, IRISH, BOURBON, RYE, SOUR MASH, CORN, OTHER WHISKEY	
3 COFFEE		4 GIN	
4 TEA		5 VODKA	
5 MILK		6 RUM	
6 SODA ONLY		7 BRANDY	
7 NOTHING		8 NAME OF DRINK (Specify)	
8 OTHER (Specify)		9 OTHER (Specify)	

____27 _____ _____ ____29

35. Why did you change? _____ ____30

_____ _____ ____31

(GO TO NEXT SITUATION CHECKED "FREQUENTLY" OR "OCCASIONALLY" ON BLUE PAGE.) (80-2)

(-05-) -12,13

24. What liquids do you usually have to drink during or around lunch time when you eat lunch in a restaurant which serves alcoholic beverages, not including when you go to a business lunch? -14 ____15

NON-ALCOHOLIC		ALCOHOLIC	
1 *JUICE ONLY	-16	1 *WINE	
2 *WATER ONLY		2 *BEER	
3 COFFEE		3 *WHISKEY, SCOTCH, CANADIAN, IRISH, BOURBON, RYE, SOUR MASH, CORN, OTHER WHISKEY	
4 TEA		4 GIN	
5 MILK		5 VODKA	
6 SODA ONLY		6 RUM	
7 NOTHING		7 BRANDY	
8 OTHER (Specify)		8 *NAME OF DRINK (Specify)	
_____		_____	
		9 OTHER (Specify)	
		_____	____17

(IF JUICE GIVEN ON Q.24, ASK:)

25. What kind of juice do you usually drink? -18
1 ORANGE
2 APPLE
3 TOMATO
4 OTHER (Specify) _____

(IF "BEER" IN Q.24, ASK:)

26. What brand of beer do you usually drink? _____ ____19 ____20

27. Is that a light or a regular beer? (CHECK APPROPRIATE)
( ) LIGHT
( ) REGULAR

(IF "WINE" IN Q.24, ASK:)

28. Do you usually drink red, white, or rosé? -21
1 RED
2 WHITE
3 ROSÉ
4 NO PREFERENCE/DEPENDS ON FOOD

29. And do you usually drink domestic or imported wine? -22
1 DOMESTIC
2 IMPORTED
3 NO PREFERENCE

(IF "WATER," IN Q.24, ASK:)

30. Is that tap water, bottled carbonated water, or bottled non-carbonated water? -23
1 TAP
2 BOTTLED CARBONATED
3 BOTTLED NON-CARBONATED

(IF NAME OF A DRINK GIVEN IN Q.24, ASK:)

31. What alcoholic beverage is in that drink? _____

(IF WHISKEY, SCOTCH, IRISH, RYE, CANADIAN, BOURBON, SOUR MASH, CORN MENTIONED IN Q.24 OR Q.31, ASK:)

32. What brand of ____ do you usually have? _____ ____24

33. Has what you drink when you eat lunch in a restaurant which serves alcoholic beverages changed over the past three years? -25
1 YES
2 NO

(IF "YES," ON Q.33, ASK:)

34. What did you drink before? -26 ____27

NON-ALCOHOLIC		ALCOHOLIC	
1 JUICE ONLY	-28	1 WINE	
2 WATER ONLY		2 BEER	
3 COFFEE		3 WHISKEY, SCOTCH, CANADIAN, IRISH, BOURBON, RYE, SOUR MASH, CORN, OTHER WHISKEY	
4 TEA		4 GIN	
5 MILK		5 VODKA	
6 SODA ONLY		6 RUM	
7 NOTHING		7 BRANDY	
8 OTHER (Specify)		8 NAME OF DRINK (Specify)	
_____		_____	
		9 OTHER (Specify)	
		_____	____29

35. Why did you change? _____ ____30

_____ ____31

(GO TO NEXT SITUATION CHECKED "FREQUENTLY" OR "OCCASIONALLY" ON BLUE PAGE.) (80-2)

(-06-) -12,13

24. What liquids do you usually have to drink when you go to a lounge or bar in the evening after work or before dinner? -14

NON-ALCOHOLIC		ALCOHOLIC	
1	*JUICE ONLY	1	*WINE
2	*WATER ONLY	2	*BEER
3	COFFEE	3	*WHISKEY, SCOTCH, CANADIAN, IRISH, BOURBON, RYE, SOUR MASH, CORN, OTHER WHISKEY
4	TEA	4	GIN
5	MILK	5	VODKA
6	SODA ONLY	6	RUM
7	NOTHING	7	BRANDY
8	OTHER (Specify)	8	*NAME OF DRINK (Specify)
	-16	9	OTHER (Specify)

_____15 _____ _____ _____17

(IF JUICE GIVEN ON Q.24, ASK:)

25. What kind of juice do you usually drink? -18
1 ORANGE
2 APPLE
3 TOMATO
4 OTHER (Specify) _____

(IF "BEER" IN Q.24, ASK:)

26. What brand of beer do you usually drink? _____ 19 20

27. Is that a light or a regular beer? (CHECK APPROPRIATE)
( ) LIGHT
( ) REGULAR

(IF "WINE" IN Q.24, ASK:)

28. Do you usually drink red, white, or rosé? -21
1 RED
2 WHITE
3 ROSÉ
4 NO PREFERENCE/DEPENDS ON FOOD

29. And do you usually drink domestic or imported wine? -22
1 DOMESTIC
2 IMPORTED
3 NO PREFERENCE

(IF "WATER," IN Q.24, ASK:)

30. Is that tap water, bottled carbonated water, or bottled non-carbonated water? -23
1 TAP
2 BOTTLED CARBONATED
3 BOTTLED NON-CARBONATED

(IF NAME OF A DRINK GIVEN IN Q.24, ASK:)

31. What alcoholic beverage is in that drink? _____

(IF WHISKEY, SCOTCH, IRISH, RYE, CANADIAN, BOURBON, SOUR MASH, CORN MENTIONED IN Q.24 OR Q.31, ASK:)

32. What brand of ____ do you usually have? _____ _____24

33. Has what you drink when you go to a lounge or bar after work or before dinner changed over the past three years? -25
1 YES
2 NO

(IF "YES," ON Q.33, ASK:)

34. What did you drink before? -26

NON-ALCOHOLIC		ALCOHOLIC	
1	JUICE ONLY	1	WINE
2	WATER ONLY	2	BEER
3	COFFEE	3	WHISKEY, SCOTCH, CANADIAN, IRISH, BOURBON, RYE, SOUR MASH, CORN, OTHER WHISKEY
4	TEA	4	GIN
5	MILK	5	VODKA
6	SODA ONLY	6	RUM
7	NOTHING	7	BRANDY
8	OTHER (Specify)	8	NAME OF DRINK (Specify)
	-28	9	OTHER (Specify)

_____27 _____ _____ _____29

35. Why did you change? _____ _____30

_____ _____31

(GO TO NEXT SITUATION CHECKED "FREQUENTLY" OR "OCCASIONALLY" ON BLUE PAGE.) (80-2)

(-07-) -12,13

24. What liquids do you usually have to drink at a party in the evening after work or before dinner?

	NON-ALCOHOLIC		ALCOHOLIC	
-14	1 *JUICE ONLY	-16	1 *WINE	
	2 *WATER ONLY		2 *BEER	
	3 COFFEE		3 *WHISKEY, SCOTCH, CANADIAN, IRISH, BOURBON, RYE, SOUR MASH, CORN, OTHER WHISKEY	
	4 TEA		4 GIN	
	5 MILK		5 VODKA	
	6 SODA ONLY		6 RUM	
	7 NOTHING		7 BRANDY	
	8 OTHER (Specify)		8 *NAME OF DRINK (Specify)	
15	_____		_____	
			9 OTHER (Specify)	
			_____ 17	

(IF JUICE GIVEN ON Q.24, ASK:)

25. What kind of juice do you usually drink? -18
1 ORANGE
2 APPLE
3 TOMATO
4 OTHER (Specify) _____

(IF "BEER" IN Q.24, ASK:)

26. What brand of beer do you usually drink? _____ 19 20

27. Is that a light or a regular beer? (CHECK APPROPRIATE)
( ) LIGHT
( ) REGULAR

(IF "WINE" IN Q.24, ASK:)

28. Do you usually drink red, white, or rose? -21
1 RED
2 WHITE
3 ROSE
4 NO PREFERENCE/DEPENDS ON FOOD

29. And do you usually drink domestic or imported wine? -22
1 DOMESTIC
2 IMPORTED
3 NO PREFERENCE

(IF "WATER," IN Q.24, ASK:)

30. Is that tap water, bottled carbonated water, or bottled non-carbonated water? -23
1 TAP
2 BOTTLED CARBONATED
3 BOTTLED NON-CARBONATED

(IF NAME OF A DRINK GIVEN IN Q.24, ASK:)

31. What alcoholic beverage is in that drink? _____

(IF WHISKEY, SCOTCH, IRISH, RYE, CANADIAN, BOURBON, SOUR MASH, CORN MENTIONED IN Q.24 OR Q.31, ASK:)

32. What brand of ____ do you usually have? _____ 24

33. Has what you drink at these parties changed over the past three years? -25
1 YES
2 NO

(IF "YES," ON Q.33, ASK:)

	NON-ALCOHOLIC		ALCOHOLIC	
34. What did you drink before? -26	1 JUICE ONLY	-28	1 WINE	
	2 WATER ONLY		2 BEER	
	3 COFFEE		3 WHISKEY, SCOTCH, CANADIAN, IRISH, BOURBON, RYE, SOUR MASH, CORN, OTHER WHISKEY	
	4 TEA		4 GIN	
	5 MILK		5 VOOKA	
	6 SOOA ONLY		6 RUM	
	7 NOTHING		7 BRANDY	
	8 OTHER (Specify)		8 NAME OF DRINK (Specify)	
27	_____		_____	
			9 OTHER (Specify)	
			_____ 29	

35. Why did you change? _____ 30

_____ 31

(GO TO NEXT SITUATION CHECKED "FREQUENTLY" OR "OCCASIONALLY" ON BLUE PAGE.) (80-2)

(-08-) -12,13

24. What liquids do you usually have to drink at home in the evening after work or before dinner? -14

NON-ALCOHOLIC		ALCOHOLIC	
1 *JUICE ONLY	-16	1 *WINE	
2 *WATER ONLY		2 *BEER	
3 COFFEE		3 *WHISKEY, SCOTCH, CANADIAN, IRISH, BOURBON, RYE, SOUR MASH, CORN, OTHER WHISKEY	
4 TEA		4 GIN	
5 MILK		5 VODKA	
6 SODA ONLY		6 RUM	
7 NOTHING		7 BRANDY	
8 OTHER (Specify)		8 *NAME OF DRINK (Specify)	
		9 OTHER (Specify)	

____15 _____ _____ ____17

(IF JUICE GIVEN ON Q.24, ASK:)

25. What kind of juice do you usually drink? -18
1 ORANGE
2 APPLE
3 TOMATO
4 OTHER (Specify) _____

(IF "BEER" IN Q.24, ASK:)

26. What brand of beer do you usually drink? _____ ____19 ____20

27. Is that a light or a regular beer? (CHECK APPROPRIATE)
( ) LIGHT
( ) REGULAR

(IF "WINE" IN Q.24, ASK:)

28. Do you usually drink red, white, or rosé? -21
1 RED
2 WHITE
3 ROSÉ
4 NO PREFERENCE/DEPENDS ON FOOD

29. And do you usually drink domestic or imported wine? -22
1 DOMESTIC
2 IMPORTED
3 NO PREFERENCE

(IF "WATER," IN Q.24, ASK:)

30. Is that tap water, bottled carbonated water, or bottled non-carbonated water? -23
1 TAP
2 BOTTLED CARBONATED
3 BOTTLED NON-CARBONATED

(IF NAME OF A DRINK GIVEN IN Q.24, ASK:)

31. What alcoholic beverage is in that drink? _____

(IF WHISKEY, SCOTCH, IRISH, RYE, CANADIAN, BOURBON, SOUR MASH, CORN MENTIONED IN Q.24 OR Q.31, ASK:)

32. What brand of ____ do you usually have? _____ ____24

33. Has what you drink after work or before dinner at home changed over the past three years? -25
1 YES
2 NO

(IF "YES," ON Q.33, ASK:)

34. What did you drink before? -26

NON-ALCOHOLIC		ALCOHOLIC	
1 JUICE ONLY	-28	1 WINE	
2 WATER ONLY		2 BEER	
3 COFFEE		3 WHISKEY, SCOTCH, CANADIAN, IRISH, BOURBON, RYE, SOUR MASH, CORN, OTHER WHISKEY	
4 TEA		4 GIN	
5 MILK		5 VODKA	
6 SODA ONLY		6 RUM	
7 NOTHING		7 BRANDY	
8 OTHER (Specify)		8 NAME OF DRINK (Specify)	
		9 OTHER (Specify)	

____27 _____ _____ ____29

35. Why did you change? _____ ____30

_____ ____31

(GO TO NEXT SITUATION CHECKED "FREQUENTLY" OR "OCCASIONALLY" ON BLUE PAGE.) (80-2)

(-09-) -12,13

24. What liquids do you usually have to drink during or around dinner time when you have dinner at home without guests? -14

NON-ALCOHOLIC		ALCOHOLIC	
1	*JUICE ONLY	1	*WINE
2	*WATER ONLY	2	*BEER
3	COFFEE	3	*WHISKEY, SCOTCH, CANADIAN, IRISH, BOURBON, RYE, SOUR MASH, CORN, OTHER WHISKEY
4	TEA	4	GIN
5	MILK	5	VOOKA
6	SODA ONLY	6	RUM
7	NOTHING	7	BRANOY
8	OTHER (Specify) _____	8	*NAME OF DRINK (Specify) _____
		9	OTHER (Specify) _____

-16 ____15 ____17

(IF JUICE GIVEN ON Q.24, ASK:)

25. What kind of juice do you usually drink? -18
1 ORANGE
2 APPLE
3 TOMATO
4 OTHER (Specify) _____

(IF "BEER" IN Q.24, ASK:)

26. What brand of beer do you usually drink? _____ ____19 ____20

27. Is that a light or a regular beer? (CHECK APPROPRIATE)
( ) LIGHT
( ) REGULAR

(IF "WINE" IN Q.24, ASK:)

28. Do you usually drink red, white, or rose? -21
1 RED
2 WHITE
3 ROSE
4 NO PREFERENCE/DEPENDS ON FOOD

29. And do you usually drink domestic or imported wine? -22
1 DOMESTIC
2 IMPORTED
3 NO PREFERENCE

(IF "WATER," IN Q.24, ASK:)

30. Is that tap water, bottled carbonated water, or bottled non-carbonated water? -23
1 TAP
2 BOTTLED CARBONATED
3 BOTTLED NON-CARBONATED

(IF NAME OF A DRINK GIVEN IN Q.24, ASK:)

31. What alcoholic beverage is in that drink? _____

(IF WHISKEY, SCOTCH, IRISH, RYE, CANADIAN, BOURBON, SOUR MASH, CORN MENTIONED IN Q.24 OR Q.31, ASK:)

32. What brand of ____ do you usually have? _____ ____24

33. Has what you drink during or around dinner time at home without guests changed over the past three years? -25
1 YES
2 NO

(IF "YES," ON Q.33, ASK:)

34. What did you drink before? -26

NON-ALCOHOLIC		ALCOHOLIC	
1	JUICE ONLY	1	WINE
2	WATER ONLY	2	BEER
3	COFFEE	3	WHISKEY, SCOTCH, CANADIAN, IRISH, BOURBON, RYE, SOUR MASH, CORN, OTHER WHISKEY
4	TEA	4	GIN
5	MILK	5	VODKA
6	SODA ONLY	6	RUM
7	NOTHING	7	BRANDY
8	OTHER (Specify) _____	8	NAME OF DRINK (Specify) _____
		9	OTHER (Specify) _____

-28 ____27 ____29

35. Why did you change? _____ ____30

_____ ____31

(GO TO NEXT SITUATION CHECKED "FREQUENTLY" OR "OCCASIONALLY" ON BLUE PAGE.) (80-2)

(-10-) -12,13

24. What liquids do you usually have to drink during or around dinner time when you eat dinner at home with friends? -14

NON-ALCOHOLIC		ALCOHOLIC	
1	*JUICE ONLY	1	*WINE
2	*WATER ONLY	2	*BEER
3	COFFEE	3	*WHISKEY, SCOTCH, CANADIAN, IRISH, BOURBON, RYE, SOUR MASH, CORN, OTHER WHISKEY
4	TEA	4	GIN
5	MILK	5	VODKA
6	SODA ONLY	6	RUM
7	NOTHING	7	BRANDY
8	OTHER (Specify)	8	*NAME OF DRINK (Specify)
		9	OTHER (Specify)

_____ -15 _____ -16 _____ _____ -17

(IF JUICE GIVEN ON Q.24, ASK:)

25. What kind of juice do you usually drink? -18
1 ORANGE
2 APPLE
3 TOMATO
4 OTHER (Specify) _____

(IF "BEER" IN Q.24, ASK:)

26. What brand of beer do you usually drink? _____ -19 -20

27. Is that a light or a regular beer? (CHECK APPROPRIATE)
( ) LIGHT
( ) REGULAR

(IF "WINE" IN Q.24, ASK:)

28. Do you usually drink red, white, or rosé? -21
1 RED
2 WHITE
3 ROSÉ
4 NO PREFERENCE/DEPENDS ON FOOD

29. And do you usually drink domestic or imported wine? -22
1 DOMESTIC
2 IMPORTED
3 NO PREFERENCE

(IF "WATER," IN Q.24, ASK:)

30. Is that tap water, bottled carbonated water, or bottled non-carbonated water? -23
1 TAP
2 BOTTLED CARBONATED
3 BOTTLED NON-CARBONATED

(IF NAME OF A DRINK GIVEN IN Q.24, ASK:)

31. What alcoholic beverage is in that drink? _____

(IF WHISKEY, SCOTCH, IRISH, RYE, CANADIAN, BOURBON, SOUR MASH, CORN MENTIONED IN Q.24 OR Q.31, ASK:)

32. What brand of ____ do you usually have? _____ -24

33. Has what you drink when you have friends for dinner changed over the past three years? -25
1 YES
2 NO

(IF "YES," ON Q.33, ASK:)

34. What did you drink before? -26

NON-ALCOHOLIC		ALCOHOLIC	
1	JUICE ONLY	1	WINE
2	WATER ONLY	2	BEER
3	COFFEE	3	WHISKEY, SCOTCH, CANADIAN, IRISH, BOURBON, RYE, SOUR MASH, CORN, OTHER WHISKEY
4	TEA	4	GIN
5	MILK	5	VODKA
6	SODA ONLY	6	RUM
7	NOTHING	7	BRANDY
8	OTHER (Specify)	8	NAME OF DRINK (Specify)
		9	OTHER (Specify)

_____ -27 _____ -28 _____ _____ -29

35. Why did you change? _____ -30

_____ -31

(GO TO NEXT SITUATION CHECKED "FREQUENTLY" OR "OCCASIONALLY" ON BLUE PAGE.) (80-2)

(-11-) -12,13

24. What liquids do you usually have to drink during or around dinner time when you have dinner with business associates? -14

NON-ALCOHOLIC		ALCOHOLIC	
1 *JUICE ONLY	-16	1 *WINE	←
2 *WATER ONLY		2 *BEER	
3 COFFEE		3 *WHISKEY, SCOTCH, CANADIAN, IRISH, BOURBON, RYE, SOUR MASH, CORN, OTHER WHISKEY	
4 TEA		4 GIN	
5 MILK		5 VOOKA	
6 SODA ONLY		6 RUM	
7 NOTHING		7 BRANDY	
8 OTHER (Specify)		8 *NAME OF DRINK (Specify)	
		9 OTHER (Specify)	

15 _____ _____ 17

(IF JUICE GIVEN ON Q.24, ASK:)

25. What kind of juice do you usually drink? -18
1 ORANGE
2 APPLE
3 TOMATO
4 OTHER (Specify) _____

(IF "BEER" IN Q.24, ASK:)

26. What brand of beer do you usually drink? _____ 19 20

27. Is that a light or a regular beer? (CHECK APPROPRIATE)
( ) LIGHT
( ) REGULAR

(IF "WINE" IN Q.24, ASK:)

28. Do you usually drink red, white, or rosé? -21
1 RED
2 WHITE
3 ROSÉ
4 NO PREFERENCE/DEPENDS ON FOOD

29. And do you usually drink domestic or imported wine? -22
1 DOMESTIC
2 IMPORTED
3 NO PREFERENCE

(IF "WATER," IN Q.24, ASK:)

30. Is that tap water, bottled carbonated water, or bottled non-carbonated water? -23
1 TAP
2 BOTTLED CARBONATED
3 BOTTLED NON-CARBONATED

(IF NAME OF A DRINK GIVEN IN Q.24, ASK:)

31. What alcoholic beverage is in that drink? _____

(IF WHISKEY, SCOTCH, IRISH, RYE, CANADIAN, BOURBON, SOUR MASH, CORN MENTIONED IN Q.24 OR Q.31, ASK:)

32. What brand of ____ do you usually have? _____ 24

33. Has what you drink when you have dinner with business associates changed over the past three years? -25
1 YES
2 NO

(IF "YES," ON Q.33, ASK:)

34. What did you drink before? -26

NON-ALCOHOLIC		ALCOHOLIC	
1 JUICE ONLY	-28	1 WINE	←
2 WATER ONLY		2 BEER	
3 COFFEE		3 WHISKEY, SCOTCH, CANADIAN, IRISH, BOURBON, RYE, SOUR MASH, CORN, OTHER WHISKEY	
4 TEA		4 GIN	
5 MILK		5 VODKA	
6 SODA ONLY		6 RUM	
7 NOTHING		7 BRANDY	
8 OTHER (Specify)		8 NAME OF DRINK (Specify)	
		9 OTHER (Specify)	

27 _____ _____ 29

35. Why did you change? _____ 30

_____ 31

(GO TO NEXT SITUATION CHECKED "FREQUENTLY" OR "OCCASIONALLY" ON BLUE PAGE.) (80-2)

(-12-) -12,13

24. What liquids do you usually have to drink during or around dinner time when you eat dinner in a restaurant which serves alcoholic beverages, not including business dinners? -14

NON-ALCOHOLIC

1 *JUICE ONLY
2 *WATER ONLY
3 COFFEE
4 TEA
5 MILK
6 SODA ONLY
7 NOTHING
8 OTHER (Specify) _____

_____15

ALCOHOLIC -16

1 *WINE
2 *BEER
3 *WHISKEY, SCOTCH, CANADIAN, IRISH, BOURBON, RYE, SOUR MASH, CORN, OTHER WHISKEY
4 GIN
5 VODKA
6 RUM
7 BRANDY
8 *NAME OF DRINK (Specify) _____
9 OTHER (Specify) _____ _____17

(IF JUICE GIVEN ON Q.24, ASK:)

25. What kind of juice do you usually drink? -18
1 ORANGE
2 APPLE
3 TOMATO
4 OTHER (Specify) _____

(IF "BEER" IN Q.24, ASK:)

_____19

26. What brand of beer do you usually drink? _____ _____20

27. Is that a light or a regular beer? (CHECK APPROPRIATE)
( ) LIGHT
( ) REGULAR

(IF "WINE" IN Q.24, ASK:)

28. Do you usually drink red, white, or rose? -21
1 RED
2 WHITE
3 ROSE
4 NO PREFERENCE/DEPENDS ON FOOD

29. And do you usually drink domestic or imported wine? -22
1 DOMESTIC
2 IMPORTED
3 NO PREFERENCE

(IF "WATER," IN Q.24, ASK:)

30. Is that tap water, bottled carbonated water, or bottled non-carbonated water? -23
1 TAP
2 BOTTLED CARBONATED
3 BOTTLED NON-CARBONATED

(IF NAME OF A DRINK GIVEN IN Q.24, ASK:)

31. What alcoholic beverage is in that drink? _____

(IF WHISKEY, SCOTCH, IRISH, RYE, CANADIAN, BOURBON, SOUR MASH, CORN MENTIONED IN Q.24 OR Q.31, ASK:)

32. What brand of ____ do you usually have? _____ _____24

33. Has what you drink when you have dinner in a restaurant which serves alcoholic berverages changed over the past three years? -25
1 YES
2 NO

(IF "YES," ON Q.33, ASK:)

NON-ALCOHOLIC

34. What did you drink before? -26
1 JUICE ONLY
2 WATER ONLY
3 COFFEE
4 TEA
5 MILK
6 SODA ONLY
7 NOTHING
8 OTHER (Specify) _____

_____27

ALCOHOLIC -28

1 WINE
2 BEER
3 WHISKEY, SCOTCH, CANADIAN, IRISH, BOURBON, RYE, SOUR MASH, CORN, OTHER WHISKEY
4 GIN
5 VODKA
6 RUM
7 BRANDY
8 NAME OF DRINK (Specify) _____
9 OTHER (Specify) _____ _____29

35. Why did you change? _____ _____30

_____ _____31

(GO TO NEXT SITUATION CHECKED "FREQUENTLY" OR "OCCASIONALLY" ON BLUE PAGE.) (80-2)

(-13-) -12,13

24. What liquids do you usually have to drink when you are home without guests after dinner and before retiring? -14 ____15

NON-ALCOHOLIC
1 *JUICE ONLY
2 *WATER ONLY
3 COFFEE
4 TEA
5 MILK
6 SODA ONLY
7 NOTHING
8 OTHER (Specify) _____

-16
ALCOHOLIC
1 *WINE
2 *BEER
3 *WHISKEY, SCOTCH, CANADIAN, IRISH, BOURBON, RYE, SOUR MASH, CORN, OTHER WHISKEY
4 GIN
5 VODKA
6 RUM
7 BRANDY
8 *NAME OF DRINK (Specify) _____
9 OTHER (Specify) _____ ____17

(IF JUICE GIVEN ON Q.24, ASK:)
25. What kind of juice do you usually drink? -18
1 ORANGE
2 APPLE
3 TOMATO
4 OTHER (Specify) _____

(IF "BEER" IN Q.24, ASK:)
____19
26. What brand of beer do you usually drink? _____ ____20

27. Is that a light or a regular beer? (CHECK APPROPRIATE)
( ) LIGHT
( ) REGULAR

(IF "WINE" IN Q.24, ASK:)
28. Do you usually drink red, white, or rosé? -21
1 RED
2 WHITE
3 ROSÉ
4 NO PREFERENCE/DEPENDS ON FOOD

29. And do you usually drink domestic or imported wine? -22
1 DOMESTIC
2 IMPORTED
3 NO PREFERENCE

(IF "WATER," IN Q.24, ASK:)
30. Is that tap water, bottled carbonated water, or bottled non-carbonated water? -23
1 TAP
2 BOTTLED CARBONATED
3 BOTTLED NON-CARBONATED

(IF NAME OF A DRINK GIVEN IN Q.24, ASK:)
31. What alcoholic beverage is in that drink? _____

(IF WHISKEY, SCOTCH, IRISH, RYE, CANADIAN, BOURBON, SOUR MASH, CORN MENTIONED IN Q.24 OR Q.31, ASK:)
32. What brand of ____ do you usually have? _____ ____24

33. Has what you drink when you're at home without guests after dinner and before retiring changed over the past three years? -25
1 YES
2 NO

(IF "YES," ON Q.33, ASK:)
34. What did you drink before? -26 ____27

NON-ALCOHOLIC
1 JUICE ONLY
2 WATER ONLY
3 COFFEE
4 TEA
5 MILK
6 SODA ONLY
7 NOTHING
8 OTHER (Specify) _____

-28
ALCOHOLIC
1 WINE
2 BEER
3 WHISKEY, SCOTCH, CANADIAN, IRISH, BOURBON, RYE, SOUR MASH, CORN, OTHER WHISKEY
4 GIN
5 VODKA
6 RUM
7 BRANDY
8 NAME OF DRINK (Specify) _____
9 OTHER (Specify) _____ ____29

35. Why did you change? _____ ____30
_____ ____31

(GO TO NEXT SITUATION CHECKED "FREQUENTLY" OR "OCCASIONALLY" ON BLUE PAGE.) (80-2)

(-14-) -12,13

24. What liquids do you usually have to drink when you have a casual evening at home with friends? -14

NON-ALCOHOLIC

1 *JUICE ONLY
2 *WATER ONLY
3 COFFEE
4 TEA
5 MILK
6 SOOA ONLY
7 NOTHING
8 OTHER (Specify) _____

____15

-16

ALCOHOLIC

1 *WINE
2 *BEER
3 *WHISKEY, SCOTCH, CANADIAN, IRISH, BOURBON, RYE, SOUR MASH, CORN, OTHER WHISKEY
4 GIN
5 VOOKA
6 RUM
7 BRANDY
8 *NAME OF DRINK (Specify) _____
9 OTHER (Specify) _____ ____17

(IF JUICE GIVEN ON Q.24, ASK:)

25. What kind of juice do you usually drink? -18
1 ORANGE
2 APPLE
3 TOMATO
4 OTHER (Specify) _____

(IF "BEER" IN Q.24, ASK:)

____19

26. What brand of beer do you usually drink? _____ ____20

27. Is that a light or a regular beer? (CHECK APPROPRIATE)
( ) LIGHT
( ) REGULAR

(IF "WINE" IN Q.24, ASK:)

28. Do you usually drink red, white, or rosé? -21
1 RED
2 WHITE
3 ROSE´
4 NO PREFERENCE/OEPENDS ON FOOD

29. And do you usually drink domestic or imported wine? -22
1 DOMESTIC
2 IMPORTED
3 NO PREFERENCE

(IF "WATER," IN Q.24, ASK:)

30. Is that tap water, bottled carbonated water, or bottled non-carbonated water? -23
1 TAP
2 BOTTLEO CARBONATED
3 BOTTLEO NON-CARBONATEO

(IF NAME OF A DRINK GIVEN IN Q.24, ASK:)

31. What alcoholic beverage is in that drink? _____

(IF WHISKEY, SCOTCH, IRISH, RYE, CANAOIAN, BOURBON, SOUR MASH, CORN MENTIONED IN Q.24 OR Q.31, ASK:)

32. What brand of ____ do you usually have? _____ ____24

33. Has what you drink in an evening at home with friends changed over the past three years? -25
1 YES
2 NO

(IF "YES," ON Q.33, ASK:)

34. What did you drink before? -26

NON-ALCOHOLIC

1 JUICE ONLY
2 WATER ONLY
3 COFFEE
4 TEA
5 MILK
6 SODA ONLY
7 NOTHING
8 OTHER (Specify) _____

____27

-28

ALCOHOLIC

1 WINE
2 BEER
3 WHISKEY, SCOTCH, CANADIAN, IRISH, BOURBON, RYE, SOUR MASH, CORN, OTHER WHISKEY
4 GIN
5 VODKA
6 RUM
7 BRANDY
8 NAME OF DRINK (Specify) _____
9 OTHER (Specify) _____ ____29

35. Why did you change? _____ ____30

_____ ____31

(GO TO NEXT SITUATION CHECKED "FREQUENTLY" OR "OCCASIONALLY" ON BLUE PAGE.) (80-2)

(-15-) -12,13

24. What liquids do you usually have to drink when you have a party in your home? -14

NON-ALCOHOLIC		ALCOHOLIC	
1 *JUICE ONLY	-16	1 *WINE	
2 *WATER ONLY		2 *BEER	
3 COFFEE		3 *WHISKEY, SCOTCH, CANADIAN, IRISH, BOURBON, RYE, SOUR MASH, CORN, OTHER WHISKEY	
4 TEA		4 GIN	
5 MILK		5 VODKA	
6 SODA ONLY		6 RUM	
7 NOTHING		7 BRANDY	
8 OTHER (Specify) _____		8 *NAME OF DRINK (Specify) _____	
		9 OTHER (Specify) _____	17

(IF JUICE GIVEN ON Q.24, ASK:)

25. What kind of juice do you usually drink? -18
1 ORANGE
2 APPLE
3 TOMATO
4 OTHER (Specify) _____

(IF "BEER" IN Q.24, ASK:)

26. What brand of beer do you usually drink? _____ 19 20

27. Is that a light or a regular beer? (CHECK APPROPRIATE)
( ) LIGHT
( ) REGULAR

(IF "WINE" IN Q.24, ASK:)

28. Do you usually drink red, white, or rosé? -21
1 RED
2 WHITE
3 ROSÉ
4 NO PREFERENCE/DEPENDS ON FOOD

29. And do you usually drink domestic or imported wine? -22
1 DOMESTIC
2 IMPORTED
3 NO PREFERENCE

(IF "WATER," IN Q.24, ASK:)

30. Is that tap water, bottled carbonated water, or bottled non-carbonated water? -23
1 TAP
2 BOTTLED CARBONATED
3 BOTTLED NON-CARBONATED

(IF NAME OF A DRINK GIVEN IN Q.24, ASK:)

31. What alcoholic beverage is in that drink? _____

(IF WHISKEY, SCOTCH, IRISH, RYE, CANADIAN, BOURBON, SOUR MASH, CORN MENTIONED IN Q.24 OR Q.31, ASK:)

32. What brand of ____ do you usually have? _____ 24

33. Has what you drink when you have a party in your home changed over the past three years? -25
1 YES
2 NO

(IF "YES," ON Q.33, ASK:)

34. What did you drink before? -26

NON-ALCOHOLIC		ALCOHOLIC	
1 JUICE ONLY	-28	1 WINE	
2 WATER ONLY		2 BEER	
3 COFFEE		3 WHISKEY, SCOTCH, CANADIAN, IRISH, BOURBON, RYE, SOUR MASH, CORN, OTHER WHISKEY	
4 TEA		4 GIN	
5 MILK		5 VODKA	
6 SODA ONLY		6 RUM	
7 NOTHING		7 BRANDY	
8 OTHER (Specify) _____		8 NAME OF DRINK (Specify) _____	
		9 OTHER (Specify) _____	29

27

35. Why did you change? _____ 30

_____ 31

(GO TO NEXT SITUATION CHECKED "FREQUENTLY" OR "OCCASIONALLY" ON BLUE PAGE.) (80-2)

(-16-) -12,13

24. What liquids do you usually have to drink when you go out to a party? -14

NON-ALCOHOLIC		ALCOHOLIC	
1 *JUICE ONLY	-16	1 *WINE	
2 *WATER ONLY		2 *BEER	
3 COFFEE		3 *WHISKEY, SCOTCH, CANADIAN, IRISH, BOURBON, RYE, SOUR MASH, CORN, OTHER WHISKEY	
4 TEA		4 GIN	
5 MILK		5 VODKA	
6. SODA ONLY		6 RUM	
7 NOTHING		7 BRANDY	
8 OTHER (Specify)		8 *NAME OF DRINK (Specify)	
		9 OTHER (Specify)	

15 _____ _____ 17

(IF JUICE GIVEN ON Q.24, ASK:)

25. What kind of juice do you usually drink? -18
1 ORANGE
2 APPLE
3 TOMATO
4 OTHER (Specify) _____

(IF "BEER" IN Q.24, ASK:)

26. What brand of beer do you usually drink? _____ 19 20

27. Is that a light or a regular beer? (CHECK APPROPRIATE)
( ) LIGHT
( ) REGULAR

(IF "WINE" IN Q.24, ASK:)

28. Do you usually drink red, white, or rose? -21
1 RED
2 WHITE
3 ROSE
4 NO PREFERENCE/DEPENDS ON FOOD

29. And do you usually drink domestic or imported wine? -22
1 DOMESTIC
2 IMPORTED
3 NO PREFERENCE

(IF "WATER," IN Q.24, ASK:)

30. Is that tap water, bottled carbonated water, or bottled non-carbonated water? -23
1 TAP
2 BOTTLED CARBONATED
3 BOTTLED NON-CARBONATED

(IF NAME OF A DRINK GIVEN IN Q.24, ASK:)

31. What alcoholic beverage is in that drink? _____

(IF WHISKEY, SCOTCH, IRISH, RYE, CANADIAN, BOURBON, SOUR MASH, CORN MENTIONED IN Q.24 OR Q.31, ASK:)

32. What brand of ___ do you usually have? _____ 24

33. Has what you drink when you go out to a party changed over the past three years? -25
1 YES
2 NO

(IF "YES," ON Q.33, ASK:)

34. What did you drink before? -26

NON-ALCOHOLIC		ALCOHOLIC	
1 JUICE ONLY	-28	1 WINE	
2 WATER ONLY		2 BEER	
3 COFFEE		3 WHISKEY, SCOTCH, CANADIAN, IRISH, BOURBON, RYE, SOUR MASH, CORN, OTHER WHISKEY	
4 TEA		4 GIN	
5 MILK		5 VODKA	
6 SODA ONLY		6 RUM	
7 NOTHING		7 BRANDY	
8 OTHER (Specify)		8 NAME OF DRINK (Specify)	
		9 OTHER (Specify)	

27 _____ _____ 29

35. Why did you change? _____ 30

_____ 31

(GO TO NEXT SITUATION CHECKED "FREQUENTLY" OR "OCCASIONALLY" ON BLUE PAGE.) (80-2)

(-17-) -12,13

24. What liquids do you usually have to drink when you go to a night club or disco? -14

NON-ALCOHOLIC		ALCOHOLIC	
1 *JUICE ONLY	-16	1 *WINE	
2 *WATER ONLY		2 *BEER	
3 COFFEE		3 *WHISKEY, SCOTCH, CANADIAN, IRISH, BOURBON, RYE, SOUR MASH, CORN, OTHER WHISKEY	
4 TEA		4 GIN	
5 MILK		5 VODKA	
6 SODA ONLY		6 RUM	
7 NOTHING		7 BRANDY	
8 OTHER (Specify)		8 *NAME OF DRINK (Specify)	
		9 OTHER (Specify)	

15 17

(IF JUICE GIVEN ON Q.24, ASK:)

25. What kind of juice do you usually drink? -18
1 ORANGE
2 APPLE
3 TOMATO
4 OTHER (Specify) _____

(IF "BEER" IN Q.24, ASK:)

19

26. What brand of beer do you usually drink? _____ 20

27. Is that a light or a regular beer? (CHECK APPROPRIATE)
( ) LIGHT
( ) REGULAR

(IF "WINE" IN Q.24, ASK:)

28. Do you usually drink red, white, or rosé? -21
1 RED
2 WHITE
3 ROSÉ
4 NO PREFERENCE/DEPENDS ON FOOD

29. And do you usually drink domestic or imported wine? -22
1 DOMESTIC
2 IMPORTED
3 NO PREFERENCE

(IF "WATER," IN Q.24, ASK:)

30. Is that tap water, bottled carbonated water, or bottled non-carbonated water? -23
1 TAP
2 BOTTLED CARBONATED
3 BOTTLED NON-CARBONATED

(IF NAME OF A DRINK GIVEN IN Q.24, ASK:)

31. What alcoholic beverage is in that drink? _____

(IF WHISKEY, SCOTCH, IRISH, RYE, CANADIAN, BOURBON, SOUR MASH, CORN MENTIONED IN Q.24 OR Q.31, ASK:)

32. What brand of ____ do you usually have? _____ 24

33. Has what you drink when you go to a night club or disco changed over the past three years? -25
1 YES
2 NO

(IF "YES," ON Q.33, ASK:)

34. What did you drink before? -26

NON-ALCOHOLIC		ALCOHOLIC	
1 JUICE ONLY	-28	1 WINE	
2 WATER ONLY		2 BEER	
3 COFFEE		3 WHISKEY, SCOTCH, CANADIAN, IRISH, BOURBON, RYE, SOUR MASH, CORN, OTHER WHISKEY	
4 TEA		4 GIN	
5 MILK		5 VODKA	
6 SODA ONLY		6 RUM	
7 NOTHING		7 BRANDY	
8 OTHER (Specify)		8 NAME OF DRINK (Specify)	
		9 OTHER (Specify)	

27 29

35. Why did you change? _____ 30

_____ 31

(GO TO NEXT SITUATION CHECKED "FREQUENTLY" OR "OCCASIONALLY" ON BLUE PAGE.) (BO-2)

(-18-) -12,13

24. What liquids do you usually have to drink at a picnic or bar-be-cue? -14

NON-ALCOHOLIC
1 *JUICE ONLY
2 *WATER ONLY
3 COFFEE
4 TEA
5 MILK .
6 SODA ONLY
7 NOTHING
8 OTHER (Specify) _____

_____15

-16
ALCOHOLIC
1 *WINE
2 *BEER
3 *WHISKEY, SCOTCH, CANADIAN, IRISH, BOURBON, RYE, SOUR MASH, CORN, OTHER WHISKEY
4 GIN
5 VODKA
6 RUM
7 BRANDY
8 *NAME OF DRINK (Specify) _____
9 OTHER (Specify) _____ _____17

(IF JUICE GIVEN ON Q.24, ASK:)
25. What kind of juice do you usually drink? -18
1 ORANGE
2 APPLE
3 TOMATO
4 OTHER (Specify). _____

(IF "BEER" IN Q.24, ASK:) _____19
26. What brand of beer do you usually drink? _____ _____20

27. Is that a light or a regular beer? (CHECK APPROPRIATE)
( ) LIGHT
( ) REGULAR

(IF "WINE" IN Q.24, ASK:)
28. Do you usually drink red, white, or rosé? -21
1 RED
2 WHITE
3 ROSÉ
4 NO PREFERENCE/DEPENDS ON FOOD

29. And do you usually drink domestic or imported wine? -22
1 DOMESTIC
2 IMPORTED
3 NO PREFERENCE

(IF "WATER," IN Q.24, ASK:)
30. Is that tap water, bottled carbonated water, or bottled non-carbonated water? -23
1 TAP
2 BOTTLED CARBONATED
3 BOTTLED NON-CARBONATED

(IF NAME OF A DRINK GIVEN IN Q.24, ASK:)
31. What alcoholic beverage is in that drink? _____

(IF WHISKEY, SCOTCH, IRISH, RYE, CANADIAN, BOURBON, SOUR MASH, CORN MENTIONED IN Q.24 OR Q.31, ASK:)
32. What brand of ____ do you usually have? _____ _____24

33. Has what you drink when you're at a picnic or bar-be-cue changed over the past three years? -25
1 YES
2 NO

(IF "YES," ON Q.33, ASK:)
34. What did you drink before? -26

NON-ALCOHOLIC
1 JUICE ONLY
2 WATER ONLY
3 COFFEE
4 TEA
5 MILK
6 SODA ONLY
7 NOTHING
8 OTHER (Specify) _____

_____27

-28
ALCOHOLIC
1 WINE
2 BEER
3 WHISKEY, SCOTCH, CANADIAN, IRISH, BOURBON, RYE, SOUR MASH, CORN, OTHER WHISKEY
4 GIN
5 VODKA
6 RUM
7 BRANDY
8 NAME OF DRINK (Specify) _____
9 OTHER (Specify) _____ _____29

35. Why did you change? _____ _____30

_____ _____31

(GO TO NEXT SITUATION CHECKED "FREQUENTLY" OR "OCCASIONALLY" ON BLUE PAGE.) (80-2)

(-19-) -12,13

		NON-ALCOHOLIC		ALCOHOLIC	
24. What liquids do you usually have to drink at a sporting event?	-14	1 *JUICE ONLY	-16	1 *WINE	
		2 *WATER ONLY		2 *BEER	
		3 COFFEE		3 *WHISKEY, SCOTCH, CANADIAN, IRISH, BOURBON, RYE, SOUR MASH, CORN, OTHER WHISKEY	
		4 TEA		4 GIN	
		5 MILK		5 VODKA	
		6 SODA ONLY		6 RUM	
		7 NOTHING		7 BRANDY	
		8 OTHER (Specify)		8 *NAME OF DRINK (Specify)	
	15	_____		_____	
				9 OTHER (Specify)	
				_____	17

(IF JUICE GIVEN ON Q.24, ASK:)

25. What kind of juice do you usually drink? -18
1 ORANGE
2 APPLE
3 TOMATO
4 OTHER (Specify) _____

(IF "BEER" IN Q.24, ASK:)

26. What brand of beer do you usually drink? _____ 19 20

27. Is that a light or a regular beer? (CHECK APPROPRIATE)
( ) LIGHT
( ) REGULAR

(IF "WINE" IN Q.24, ASK:)

28. Do you usually drink red, white, or rose? -21
1 RED
2 WHITE
3 ROSE
4 NO PREFERENCE/DEPENDS ON FOOD

29. And do you usually drink domestic or imported wine? -22
1 DOMESTIC
2 IMPORTED
3 NO PREFERENCE

(IF "WATER," IN Q.24, ASK:)

30. Is that tap water, bottled carbonated water, or bottled non-carbonated water? -23
1 TAP
2 BOTTLED CARBONATED
3 BOTTLED NON-CARBONATED

(IF NAME OF A DRINK GIVEN IN Q.24, ASK:)

31. What alcoholic beverage is in that drink? _____

(IF WHISKEY, SCOTCH, IRISH, RYE, CANADIAN, BOURBON, SOUR MASH, CORN MENTIONED IN Q.24 OR Q.31, ASK:)

32. What brand of ____ do you usually have? _____ 24

33. Has what you drink when you're at a sporting event changed over the past three years? -25
1 YES
2 NO

(IF "YES," ON Q.33, ASK:)

		NON-ALCOHOLIC		ALCOHOLIC	
34. What did you drink before?	-26	1 JUICE ONLY	-28	1 WINE	
		2 WATER ONLY		2 BEER	
		3 COFFEE		3 WHISKEY, SCOTCH, CANADIAN, IRISH, BOURBON, RYE, SOUR MASH, CORN, OTHER WHISKEY	
		4 TEA		4 GIN	
		5 MILK		5 VODKA	
		6 SODA ONLY		6 RUM	
		7 NOTHING		7 BRANDY	
		8 OTHER (Specify)		8 NAME OF DRINK (Specify)	
	27	_____		_____	
				9 OTHER (Specify)	
				_____	29

35. Why did you change? _____ 30

_____ 31

(80-2)

(-20-)

36. Now I'd like to know a little bit about you -- first I'd like to get an idea of the kinds of things you do in your spare time. Would you please tell me how many times a year, if at all, do you go to the following events?

	NO. OF TIMES	
Movies	_____	-12,13
Opera, Symphony or Other Classical Concerts	_____	-14,15
Folk/Rock/Jazz Concerts	_____	-16,17
Plays	_____	-18,19
Ballet	_____	-20,21
Professional football games	_____	-22,23
Professional basketball games	_____	-24,25
Professional baseball games	_____	-26,27
Professional ice hockey games	_____	-28,29
Professional soccer games	_____	-30,31
Professional golf tournaments	_____	-32,33
College sporting events	_____	-34,35

37. Do you participate in any sports, or athletic activities, yourself? — 1 YES, 2 NO — -36

(IF "YES", ON Q.37, ASK:)

|38. Which ones? _____ 37

| _____ 38

39. Do you belong to any country clubs? — 1 YES, 2 NO — -39

40. Do you belong to any health or athletic clubs? — 1 YES, 2 NO — -40

41. In an average weekday, not on a weekend day, about how many hours do you usually spend watching television? _____ # HOURS -41,42

42. Now, in an average weekend day, about how many hours do you usually spend watching television? _____ # HOURS -43,44

43. How many magazines do you and others in your household usually receive or purchase in an average month? _____ # MAGAZINES -45,46

44. About how many books would you say you read in an average month? _____ # BOOKS -47,48

Finally, I have just a few background questions for classification purposes only.

45. Are you employed outside the home full time, part time, or not at all, or are you a full-time student? — 1 FULL TIME, 2 PART TIME, 3 NOT AT ALL, 4 FULL-TIME STUDENT — -49

(IF "FULL TIME" OR "PART TIME" ON Q.45 ASK:)

|46. What is your occupation? _____ 50

47. What is the last grade of school you attended? (IF NECESSARY, READ CHOICES) — -51

1 LESS THAN HIGH SCHOOL
2 HIGH SCHOOL DIPLOMA OR G.E.D.
3 TECHNICAL SCHOOL
4 SOME COLLEGE (LESS THAN 4 YEARS)
5 4-YEAR COLLEGE DEGREE (B.A., B.S. OR EQUIVALENT)
6 SOME GRADUATE SCHOOL
7 MASTERS DEGREE
8 PROFESSIONAL DEGREE (e.g.,LL.B., M.D., PH.D, D.V.M., D.D.S.)

48. Are you . . . (READ CHOICES)
1 Married
2 Single
3 Widowed
4 Divorced
5 Separated
-52

(IF "MARRIED" ON Q.48, ASK:)

49. Is your spouse employed outside the home full time, part time, or not at all, or is your spouse a full-time student?
1 FULL TIME
2 PART TIME
3 NOT AT ALL
4 FULL-TIME STUDENT
-53

(IF "FULL TIME," OR "PART TIME" ON Q.49, ASK:)

50. What is his/her occupation? _____ ____54

51. In which of these age categories do you fall? (READ CHOICES)
1 21 - 24
2 25 - 29
3 30 - 34
4 35 - 39
5 40 - 44
6 45 - 49
7 50 - 54
-55

52. Have you moved in the past three years?
1 YES
2 NO
-56

(IF "YES" ON Q.52, ASK:)

53. Did you move from one state to another?
1 YES
2 NO
-57

(IF "YES" ON Q.53, ASK:)

54. What state did you used to live in? _____ ____58,59

55. Three years ago, did you live in an urban, suburban, or rural area?
1 URBAN
2 SUBURBAN
3 RURAL
-60

56. Do you now live in an urban, suburban or rural area?
1 URBAN
2 SUBURBAN
3 RURAL
-61

57. Into which of these categories does your annual household income fall. . . (READ CHOICES)
1 $18,000 to less than $25,000
2 $25,000 to less than $30,000
3 $30,000 to less than $35,000
4 $35,000 to less than $40,000
5 $40,000 to less than $45,000
6 $45,000 to less than $50,000
7 $50,000 or more.
-62

58. Which of these best describes your home? (READ CHOICES)
1 House
2 Apartment
3 Condominium/Co-op
4 Mobile Home
5 OTHER (DON'T READ)_____
-63

59. Do you own or rent your home?
1 OWN
2 RENT
-64

(IF "OWN" ON Q.59, ASK)

60. Into which of these categories would you say the value of your house falls? (READ CHOICES)
1 Under $50,000
2 $50,000-under $100,000
3 $100,000-under $150,000
4 $150,000-under $200,000
5 $200,000-under $250,000
6 $250,000-under $300,000
7 $300,000 or more
-65

Thank you very much!

TIME ENDED: _____

TIME ELAPSED: _____ -66,67

INTERVIEWER: _____ _____

DATE: _____

(CIRCLE APPROPRIATE QUOTA GROUP ON PAGE 1.) (80-3)

APPENDIX B

AN EXAMPLE OF
A 2x2x2x2x2x2 CONTINGENCY TABLE

INC.	EDUCATION	OCCUPATION	AGE	CLUB MEM	PRO GAMES	
					YES	NO
HIGH	HIGH SC.	MANAGERIAL	<35	YES	f_{111111}	f_{111112}
HIGH	HIGH SC.	MANAGERIAL	<35	NO	f_{111121}	f_{111122}
HIGH	HIGH SC.	MANAGERIAL	>35	YES	f_{111211}	f_{111212}
HIGH	HIGH SC.	MANAGERIAL	>35	NO	f_{111221}	f_{111222}
HIGH	HIGH SC.	CLERICAL	<35	YES	f_{112111}	f_{112112}
HIGH	HIGH SC.	CLERICAL	<35	NO	f_{112121}	f_{112122}
HIGH	HIGH SC.	CLERICAL	>35	YES	f_{112211}	f_{112212}
HIGH	HIGH SC.	CLERICAL	>35	NO	f_{112221}	f_{112222}
HIGH	COLLEGE	MANAGERIAL	<35	YES	f_{121111}	f_{121112}
HIGH	COLLEGE	MANAGERIAL	<35	NO	f_{121121}	f_{121122}
HIGH	COLLEGE	MANAGERIAL	>35	YES	f_{121211}	f_{121212}
HIGH	COLLEGE	MANAGERIAL	>35	NO	f_{121221}	f_{121222}
HIGH	COLLEGE	CLERICAL	<35	YES	f_{122111}	f_{122112}
HIGH	COLLEGE	CLERICAL	<35	NO	f_{122121}	f_{122122}
HIGH	COLLEGE	CLERICAL	>35	YES	f_{122211}	f_{122212}
HIGH	COLLEGE	CLERICAL	>35	NO	f_{122221}	f_{122222}
LOW	HIGH SC.	MANAGERIAL	<35	YES	f_{211111}	f_{211112}
LOW	HIGH SC.	MANAGERIAL	<35	NO	f_{211121}	f_{211122}
LOW	HIGH SC.	MANAGERIAL	>35	YES	f_{211211}	f_{211212}
LOW	HIGH SC.	MANAGERIAL	>35	NO	f_{211221}	f_{211222}
LOW	HIGH SC.	CLERICAL	<35	YES	f_{212111}	f_{212112}
LOW	HIGH SC.	CLERICAL	<35	NO	f_{212121}	f_{212122}
LOW	HIGH SC.	CLERICAL	>35	YES	f_{212211}	f_{212212}
LOW	HIGH SC.	CLERICAL	>35	NO	f_{212221}	f_{212222}
LOW	COLLEGE	MANAGERIAL	<35	YES	f_{221111}	f_{221112}
LOW	COLLEGE	MANAGERIAL	<35	NO	f_{221121}	f_{221122}
LOW	COLLEGE	MANAGERIAL	>35	YES	f_{221211}	f_{221212}
LOW	COLLEGE	MANAGERIAL	>35	NO	f_{221221}	f_{221222}
LOW	COLLEGE	CLERICAL	<35	YES	f_{222111}	f_{222112}
LOW	COLLEGE	CLERICAL	<35	NO	f_{222121}	f_{222122}
LOW	COLLEGE	CLERICAL	>35	YES	f_{222211}	f_{222212}
LOW	COLLEGE	CLERICAL	>35	NO	f_{222221}	f_{222222}

APPENDIX C

AN EXAMPLE OF A THREE LATENT CLASS MODEL

VARIABLE	LEVEL	LATENT CLASS PROBABILITIES		
		Class 1	Class 2	Class 3
INCOME	HIGH	0.70	0.25	0.55
	LOW	0.30	0.75	0.45
EDUCATION	HIGH SCH.	0.40	0.60	0.60
	COLLEGE	0.60	0.40	0.40
OCCUPATION	MANAGERIAL	0.80	0.30	0.30
	CLERICAL	0.20	0.70	0.70
AGE	<35	0.70	0.40	0.10
	>35	0.30	0.60	0.90
BELONG TO CLUB	YES	0.50	0.30	0.90
	NO	0.50	0.70	0.10
ATTEND PRO GAME	YES	0.65	0.45	0.40
	NO	0.35	0.55	0.60
LATENT CLASS SIZE		0.35	0.45	0.20

APPENDIX D

TABLES ANALYZED FOR THE FINAL TABLE SELECTION

Var7 by Var8 by Var9 by Var10 by Var12 by Var13

Var3 by Var7 by Var8 by Var9 by Var10 by Var12

Var4 by Var7 by Var8 by Var9 by Var10 by Var12

Var7 by Var8 by Var9 by Var10 by Var11 by Var13

Var4 by Var7 by Var8 by Var9 by Var10 by Var11

Var7 by Var8 by Var9 by Var10 by Var11 by Var12

Var8 by Var9 by Var10 by Var11 by Var12 by Var13

Var3 by Var8 by Var9 by Var10 by Var11 by Var12

Var4 by Var8 by Var9 by Var10 by Var11 by Var12

Var7 by Var9 by Var10 by Var11 by Var12 by Var13

Var3 by Var7 by Var9 by Var10 by Var11 by Var12

Var4 by Var7 by Var9 by Var10 by Var11 by Var12

Var7 by Var8 by Var10 by Var11 by Var12 by Var13

Var3 by Var7 by Var8 by Var10 by Var11 by Var12

Var4 by Var7 by Var8 by Var10 by Var11 by Var12

Var7 by Var8 by Var9 by Var11 by Var12 by Var13

Var3 by Var7 by Var8 by Var9 by Var11 by Var12

Var4 by Var7 by Var8 by Var9 by Var11 by Var12

BIBLIOGRAPHY

Ajzen, I., and Fishbein, M., 'The Prediction of Behavioral Intentions in a Choice Situation,' *Journal of Experimental Social Psychology* 5, 1969, 400-416.

———, 'The Prediction of Behavior from Attitudinal and Normative Variables,' *Journal of Experimental Social Psychology* 6, 1972, 466-487.

Assael, Henry, *Consumer Behavior and Marketing Action,* Boston Kent Publishing Company, 1981.

———, **and A. Marvin Roscoe Jr.,** 'Approaches to Market Segmentation,' *Journal of Marketing*, 40, October, 1976, 67-76.

Baggozi, Richard P., 'Salesforce Performance and Satisfaction as a Function of Individual Differences, Interpersonal, Situational Factors,' *Journal of Marketing Research*, 15, November, 1978, 517-531

Barker, Roger G., *Ecological Psychology Concepts and Methods for Studing the Environment of Human Behavior,* Stanford, CA, Stanford University Press, 1968.

———, 'Comentaries on Belk, 'Situational Variables and Consumer Behavior,'' *Journal of Consumer Research*, 2, December, 1975, 165.

Bearden, William O. and Woodside, Arch. G., 'Interaction of Consumption Situations and Brand Attitutes,' *Journal of Applied Psychology*, 61, December, 1976, 764-769.

———, **and** ———, 'Situational Influence on Consumer Purchase Intentions,' *Consumer and Industrial Buying Behavior,* Arch Woodside, Jagdish N. Sheth, and Peter D. Bennett, eds., New York, NY, Elsevier North-Holland, 1977, 167-177.

Belk, Russell W., 'An Exploratory Assessment of Situational Effects in Buyer Behavior' *Journal of Marketing Research,* 11, 1974a, 156-163.

———, 'Application and Analysis of the Behavioral Differential Inventory for Assessing Situational Effects in Consumer Behavior, *Advances in Consumer Research,* 1, S. Ward and P. Wright, eds., Urbana Association for Consumer Research, 1974b, 370-388.

———, 'Reply to Barker and Wicker,' *Journal of Consumer Research*, 2, December, 1975a, 157-164.

———, 'Situational Variables and Consumer Behavior,' *Journal of Consumer Research*, 2, 1975b, 157-164.

———, 'A Free Response Approach to Developing Product-Specific Consumption Situation Taxonomies,' *Analytic Approches to Product and Market Planning,* Allan D. Shocker, eds., Cambridge, MA, Marketing Science Institute, 1979, 177-196.

Berkowitz, Eric N., Ginter, James L. and Talarzyk, W. Wayne, 'An Investigation of the effects of Specific Usage Situations on the Prediction of Consumer Choice Behavior,' B.A Greenberg and D. N. Bellinger eds.,, *Contemporary Thought in Marketing, 1977 Educators' Proceedings,* Series No. 41. Chicago American Marketing Association, 1977, 90-94.

Bishop, D.W. and Witt, P.A., 'Sources of Behavioral Variance During Leisure Time,' *Journal of Personality and Social Psychology*, 16, 1970, 352-360.

Brislin, R. W., and Olmstead, K.H., 'Examination of Two Models Designed to Predict Behavior from Attitude and Other Verbal Measures,' *Proceedings of the 81st Annual Convention,* American Psychological Association, 1973, 259-260.

Capon, Noel., and Burke, Marian, 'Information Seeking Behavior in Consumer Durable Purchase,' *Contemporary Marketing Thought, 1977 Educator's Proceedings,* Series 41, Barnett A. Greenberg and Danny N. Bellenge, eds., Chicago, IL, American Marketing Association,1977, 110-115.

Clogg, C. C., 'Unrestricted and Restricted Maximum Likelihood Latent Structure Analysis A Manual for Users,' Working Paper 1977-09, University Park, Penn., Population Issues Research Office. *American Statistical Association,*

———, **and Goodman,** 'Latent Structure Analysis of a Set of Multidimensional Contingency Tables,' *Journal of the American Statistical Association*, 79, December, 1984, 762-771.

Day, G. S., 'Theories of Attitude Structure and Change,' In *Consumer Behavior Theoritical Sources*, S. Ward and T. S. Robertson, eds., Englewood Cliffs, N.J., Prentice Hall, 1973, 305-353.

———, **Shocker, Allan D, and Srivastava, Rajendra K.,** 'Identifying Competitive Product Markets A Review of Customer Oriented Approaches,' *Journal of Marketing,* 43, Fall 1979, 8-19.

Dickson, Peter R., 'Person Situation Segmentation's Missing Link,' *Journal of Marketing*, 46, Fall 1982, 56-64.

Dillon, William, R., and Goldstein, Matthew, *Multivariate Analysis Methods and Applications,* New York, John Wiley, 1984.

Ekehammar, B., 'Interactionism in Personality from a Historical Perspective,' *Psychological Bulletin*, 81, No. 2, 1974, 1026-1048.

Endler, N. S., 'The Person Versus the Situation-A Pseudo Issue? A Response to Alker,' *Journal of Personality*, 41, 1973, 287-303.

Engel, J.F., Kollat, David T., and Blackwell, Roger D., *Consumer Behavior,* New York, Holt, Rinehart, and Winston, 1968.

Epstein, Seymour, 'The Stability if Behavior on Predicting Most of the People Much of the Time,' *Journal of Personality and Social Psychology*, 37, No. 7, 1979, 1097-1125.

Fennell, Geraldine, 'Consumer's Perception of the Product-Use Situation,' *Journal of Marketing*, 42, April 1978, 38-46.

———, 'Terms Versus Concepts Market Segmentation, Brand Positioning and Other Aspects of the Academic-Practitioner Gap,'1982.

Fishbein, M., 'Attitudes and the Prediction of Behavior,' *Readings in Attitude Theory and Measurement,* M. Fishbein, eds.,New York Wiley, 1967, 477-492.

———, **and Ajzen, Icek,** *'Beliefs, Attitudes, Intentions and Behavior An Introduction to Theory and Research,* Readings, MA Addison-Wesley, 1975.

Ford, Jeffery D., and Ellis, Elwood A., 'A Reexamination of Group Influence on Member Brand Preference,' *Journal of Marketing Research*, 17, February, 1980, 125-132.

Frank, Ronald L., Massy, W.F., and Wind, Yoram, *Market Segmentation*, Englewood Cliffs, NJ, Prentice-Hall, 1972.

Frederiksen, Norman, 'Toward a Taxonomy of Situations,' *American Psychologist*, 1972, 114-123.

Goodman, Leo A., 'The Analysis of Multidimensional Contigency Tables Stepwise Procedures and Direct Estimation Methods for Building Models for Multiple Classifications,' *Technometrics* , 13, February, 1971, 33-61.

———, 'A Modified Multiple Regression Approach to the Analysis of Dichotomous Variables,' *American Sociological Review* , 37, February, 1972, 28-46.

———, The Analysis of Systems of Qualitative Variables When Some of the Variables are Unobservables, Part I A Modified Latent Structure Approach,' *American Journal of Sociology*, 79, 1974a, 1179-1259.

———, 'Exploratory Latent Structure Analysis Using Both Identifiable and Unidentifiable Models,' *Biometrica*, 61, 1974b, 215-231.

———, **and Kruskal, J. B.,** 'Measures of Association for Cross-Classifications,' *Journal of the American Statistical Association*, 49, 1954, 732-764.

Green, Paul E., Carmone, Frank J., and Wachspress, David, 'Consumer Segmentation via Latent Class Analysis,' *Journal of Consumer Research*, 3, December, 1976, 170-174.

———, **and Rao, Vithala,** 'Configuration Synthesis in Multidimentional Scaling,' *Journal of Marketing Research*, 9, February, 1972, 65-68.

———, **and Wind, Yoram,** *Multiattribute Decisions in Marketing A Measurement Approach,* Hinsdale, IL, Dryden Press, 1972.

Greenberg, G. Marshall, 'Occasion-Based Segmentation: Five Years Later,' *1982 Educators' Proceedings,* Series No. 48, Bruce J. Walker, William O. Bearden, William R. Darden, Patrick E. Murphy, John R. Nevin, Jerry C. Olson, and Barton A. Weitz, eds., Chicago, IL, American Marketing Association.

Grossbart, Stanford., Amadeo, Douglas and Chinchen,David, 'The Influence of Retail Environments on Consumer Cognitions and Feelings,' *1979 Educators' Proceedings,* Series No. 44, Neil Beckwith, Michael Houston, Robert Mittlestaedt, Kent Monroe, and Scott Ward, eds., Chicago, IL, American Marketing Association, 268-273.

Haberman, S. J., *Analysis of Qualitative Data,* Vol 1, New York, Academic Press, 1978.

Haley, Russell, 'Benefit Segmentation A Decision-Oriented Research Tool,' *Journal of Marketing*, 32, 1968, 30-35.

Hansen, Fleming, *Consumer Choice Behavior,* New York, The Free Press, 1972.

Hisrich, Robert D., Dornuff, Ronald J., and Kernan, Jerome B., 'Perceived Risk in Store Selection,' *Journal of Marketing Research,* 9, November, 1972, 432-439.

Howard, John A., *Marketing Management Analysis and Planning,* Revised Edition, Homewood, IL, Irwin, 1963.

———, **and Sheth, Jadgish N.,** *The Theory of Buyer Behavior,* New York,NY, John Wiley, 1969.

Hustad, Thomas P., Mayer, Charles S., and Whipple, Thomas W., 'Consideration of Context Difference in Product Evaluation and Market Segmentation,' *Journal of the Academy of Marketing Science*, vol. 3, Winter 1976, 34-47.

Kakkar, Pradeep K. and Lutz, Richard J., 'Toward a Taxonomy of Consumption Situations,' *1975 Combined Proceedings*, Series No. 37, Edward M. Mazze ed., Chicago, American Marketing Association, 1975, 206-210.

Kantor, J. R., *Principles of Psychology,* Vol 1. Bloomington Principia Press, 1924.

———, *Priciples of Psychology,* Vol 2, Bloomington, Principia Press, 1926.

Kassarjian, H. H., 'Personality and Consumer Behavior A Way Out of the Morass,' Working paper no. 3, Center for Marketing Studies, University of California, Los Angeles, 1973.

Kotler, Philip, 'Atmospherics as a Marketing Tool,' *Journal of Retailing*, 49, Winter 1973/74, 48-64.

———, *Marketing Management Analysis Planning and Control*, Fourth edition, New York, Prentice Hall, 1980.

———, *Marketing Manegement Analysis Planning and Control* Fifth edition, New York. Prentice Hall, 1984.

Lazarsfeld, Paul F., 'The Logical and Mathematical Foundation of Latent Structure Analysis,' *Measurement and Prediction* , S. A. Stoffer et al., eds., Princeton, Princeton University Press, 1950.

———, **and Henry, N.W.**, *Latent Structure Analysis,* Boston, Houghton Mifflin, 1968.

Leign, James H., and Martin, Claude R., 'A Review of Situational Influence Paradigms and Research,' *Review of Marketing 1981* , Ben M. Enis and Kenneth J. Roering, eds., Chicago, American Marketing Association, 1981, 57-71.

Lewin, Kurt, *A Dynamic Theory of Personality Selected Papers* , New York, McGraw-Hill,1935.

———, *Principles of Topological Psychology,* New York, McGraw-Hill, 1936.

———, 'The Conceptual Representation and the Measurement of Psychological Forces,' *Contributions to Psychological Theory,* vol 1, D. K. Adams and H. Lundholm, eds., Durham Duke University Press, 1938.

———, *Field Theory in Social Science Selected Theoritical Papers,* New York, Harper, 1951.

Lutz, Richard and Kakkar, Pradeep K., 'The Psychological Situation as a Determinant of Consumer Research', *Advances in Consumer Research* , M.J. Schlinger, ed., Chicago, Association for Consumer Research, 1975, 434-453.

———, **and** ———, 'Situational Influences in Interpersonal Persuation,' *Advances in Consumer Research,* Beverlee B. Anderson, ed., Ann Arbor, MI Association for Consumer Research, 1976, 370-378.

Mehrabian A., and Russell, J.A., *An Approach to Environmental Psychology,* Cambridge, MIT Press, 1974.

Miller, Kenneth E., 'A Test of a Situational Multy-Attribute Model', *Advances in Consumer Research,* M.J. Schlinger, ed., Chicago, Association for Consumer Research, 1975, 455-463.

———, **and Ginter, James L.**, 'An Investigation of Situational Variation in Brand Choice Behavior and Attitude,' *Journal of Marketing Research.* 16, February, 1979, 111-123.

Mischel, W., *Personality and Assessment,* New York, John Wiley and Sons, 1968.

Morein, Joseph A., 'Shift from Brand to Product Line Marketing,' *Harvard Business Review,* 53, September-October, 1975, 56-64.

Myers, James H., and Tauber. Edward, *Market Structure Analysis,* Chicago, American Marketing Association, 1977.

Nord, Walter R., and Peter, J. Paul, 'A Behavior Modification Perspective on Marketing,' *Journal of Marketing*, 44, Spring 1980, 36-47.

Park, C. Whan., Bahr, William J., 'A Situational Analysis of Communication Effect A New Product Purchase by Mail Order,' *Advances in Consumer Research,* Jerry C. Olson, ed., Ann Arbor, MI, Association for Consumer Research, 1980, 650-654.

Reingen, Peter H., 'Demand Bias in the Assessment of Situational Effects on Buyer Behavior,' *Advances in Consumer Research,* Beverlee B. Anderson, ed., Chicago, IL, Association for Consumer Research, 1976, 130-133.

Rokeach, M., 'Attitude Change and Behavioral Change,' *Public Opinion Quarterly*, 30, 1967, 529-550.

Russell, James A., and Mehrabian, Albert, 'Environmental Variables in Consumer Research,' *Journal of Consumer Research*, 3, June, 1976, 62-63.

Sandell, R.G., 'The Effects of Attitudinal and Situational Factors on Reported Choice Behavior,' *Journal of Marketing Research*, 4, 1968, 405-408.

Shanteau, James., and Ptacek, Charles H., 'Situation Determinants of Consumer Decision Making,' *Proceedings of the Division 23 Program,* 85th Annual Convention of the American Psychological Association held in San Francisco, Clark Leavitt, ed., August, 1977, 28-29.

Sharpe, K. Louis, and Granzin, Kent L., 'Market Segmentation by Consumer Usage Context An Exploratory Analysis,' *Journal of Business and Economics*, 1974, 225-228.

Spence, Homer F., Engel, James F., and Blackwell, Roger D., 'Perceived Risk in Mail-Order and Retail Store Buying,' *Journal of Marketing Research* , 7, August, 1970, 364-369.

Srivastava, Rajendra K., 'Usage-Situational Influences on the Perceptions of Product Markets Response Homogeneity end Its Implications for Consumer Research,' *Advances in Consumer Research* , Jerry C. Olson, ed., Ann Arbor, MI, Association for Consumer Research, 1980, 644-649.

———, **and Albert, Mark.** 'A Customer Oriented Approach For Determining Market Structures,' *1982 Educators' Proceedings*, Series No. 48, Bruce J. Walker, William O. Bearden, William R. Darden, Patrick E. Murphy, John

R. Nevin, Jerry C. Olson, and Barton A. Weitz, eds., Chicago, IL, American Marketing Association, 1982, 26-56.

———, **Shocker, Allan D., and Day, George S.**, 'An Exploratory Study of the Influences of Usage Situation on Perceptions of Product Markets', *Advances in Consumer Research,* H. Keith Hunt, ed. Ann Arbor, MI, Association for Consumer Research, 1978, 32-38.

Stanton, John L., and Bonner, P. Gregg, 'An Investigation of the Differential Impact of Purchase Situation on Levels of Consumer Choice Behavior,' *Advances in Consumer Research,* Jerry C. Olson, ed., Ann Arbor, MI, Association for Consumer Research, 1980, 639-643.

Stout, R., Suh, R. H., Greenberg, M. G., and Dubow, J. S., 'Usage Incidents as a Basis for Segmentation,' *Moving A Head with Attitude Research,* Proceedings of the 7th Anual Conference Held at Hilton S.C., Jerry Wind and and Marshall Greenberg, eds., Chicago, IL, American Marketing Association, 1977, 45-49.

Vroom, V. H., *Work and Motivation,* New York Wiley, 1964.

Vincent, M., and Zikmund, W.G., 'An Experimental Investigation of Situational Effects on Risk Perception. *Advances in Consumer Research,* B.B. Anderson, ed., Cincinnati Association of Consumer Research, 1976, 125-129.

Warshaw, Paul R., 'Predicting Purchase and Other Behaviors from and General and Contextually Specific Intentions,' *Journal of Marketing Research,* 17, February, 1980, 26-33.

Wells, William D., 'Psychographics A Critical Review,' *Journal of Marketing Research*, 12, May, 1975, 196-211.

Wicker, A., 'Attitudes Versus Actions The Relationship of Verbal and Overt Behavioral Responses to Attitude Objects,' *Journal of Social Issues*, 25, 1969, 41-78.

———, 'Commentaries on Belk, 'Situational Variables and Consumer Behavior,' *Journal of Consumer Research*, 5, December, 1975,165-167.

Wind, Yoram, 'Issues and Advances in Segmentation Research,' *Journal of Marketing Research*, 14, August, 1978, 317-337.

Winter, Frederick W., 'A Cost Benefit Approach to Market Segmentation,' *Journal of Marketing*, Fall 1977, 103-111.

Woodside, Arch., Bearden. William O.,, and Clokey, James D., 'Effects of Consumption Situations and Multibrand Attitudes on Consumer Brand Choice,' *Moving Ahead with Attitude Research,* Proceedings of the 7th Annual Conference held at Hilton Head, S.C. Jerry Wind and Marshall Greenberg, eds., Chicago, IL, Amarican Marketing Association, 1977, 58-65.

Zahn, D. A. and Fein, S. B., 'Large Contingency Tables with Large Cell Frequencies, A Modern Search Algorithm and Alternative Measures of Fit,' *Psychological Bulletin*, 86, November, 1979, 1189-1200.